THE PUUC

AN ARCHITECTURAL SURVEY OF THE HILL COUNTRY OF YUCATAN AND NORTHERN CAMPECHE, MEXICO

H. E. D. POLLOCK

PEABODY MUSEUM OF ARCHAEOLOGY AND ETHNOLOGY
HARVARD UNIVERSITY·CAMBRIDGE, MASSACHUSETTS

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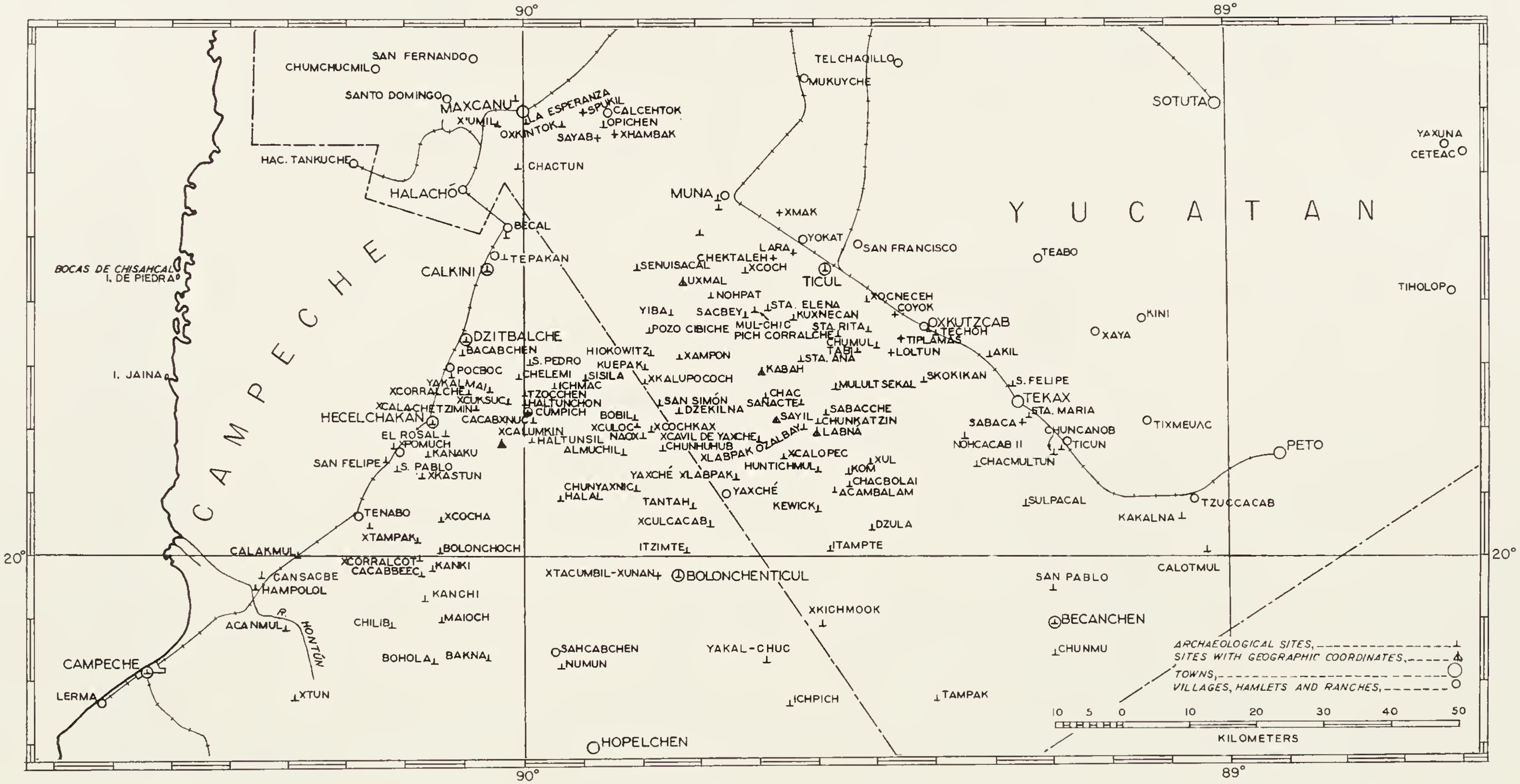

Frontispiece. Archaeological map of the Puuc area.

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Preface

This book records a good-sized sample of the formal architecture of the ancient Maya who inhabited a relatively small but at one time heavily populated region of the Yucatan peninsula. The fieldwork, which was under the auspices of and supported by Carnegie Institution of Washington, was begun in 1932 and largely completed by 1940. More will be said of both the region and the fieldwork, but for the moment I should like to give attention to the reasons why the work described here was undertaken.

The 1920s were a time of great vitality in Mesoamerican archaeology, and by the end of the decade there was considerable searching for new directions in the pursuit of Maya studies. An article by Morley (1929) mirrors this situation as does another by Kidder (1930) where he describes his new multidisciplinary approach to such studies. Both of these articles call for an architectural survey of the Maya area, and in 1931, at Kidder's request, I wrote a short statement (Pollock 1931) of what I conceived as the purpose of and practical approach to a project of that sort. The fieldwork that ensued was essentially based on the ideas contained in that statement. Although no specific choice of the area where the work might begin was mentioned, it was stated that the study of known sites with a considerable amount of standing architecture seemed desirable. The Puuc region presented these conditions par excellence and in addition was relatively easy of access. It was thus chosen as the area in which to begin the survey.

I think it may be well to give a moment's attention to the general status of Maya archaeology when the architectural survey was carried out. Briefly, wide-ranging exploration resulting in the discovery of new sites and the collection of new hieroglyphic texts had been followed by careful, controlled excavations which in turn had focused attention on stratigraphy, a tool well understood but previously little used in Maya archaeology, and particularly on the study of pottery gathered under stratigraphic conditions. Kidder's multidisciplinary approach has been mentioned. Not greatly stressed at the time, but of future significance, was the developing study of the domestic building of the Maya. A.L. Smith's (1929; and see Kidder 1930, p. 95), Wauchope's (Kidder 1932, p. 100), and Ricketson's (Ricketson and Ricketson, 1937, pp. 15–24) mapping and excavation of house mounds as a method for estimating population were of particular importance. G. R. Willey, under whose genius the study of prehistoric settlement became so potent an implement to advance the understanding of ancient cultures, has given an excellent account of the growth of a peripheral interest in the domestic houses of the Maya to the infinitely more complex issue of settlement pattern as a reflection of their past civilization (Willey et al. 1965, chap. 2). Unfortunately, the study of the simple houses of the Maya was envisioned as quite separate from the survey of architecture I was about to undertake. It would have been most advantageous had the domestic architecture been kept more in mind during the course of the work.

I should like to revert briefly to my statement (Pollock 1931) concerning the purposes and implementation of an architectural survey of the Maya area. As I reread those few paragraphs of forty years ago, I am both amused and appalled at the heroic proportions of my plans, for it seems that I contemplated carrying out an architectural survey of the entire lowland Maya area, digesting the results of the work, formulating new avenues of approach to the problems raised, and, in due course, setting about to solve those problems. Alas, life rarely allows the luxury of pursuing so single-minded a purpose, and nine years later, with but four field seasons behind me, the work of the survey was virtually over—although I did not know it at the time—and publication was in the distant future.

Quite a different matter from my perhaps overly grand plan is what now seems to me an unwarranted optimism of a different sort, namely, that the survey suggested might uncover a sequence of architectural forms—might allow the ordering of architectural styles in time and place—and might to some extent elucidate the function of the architecture. True enough, the plan encompassed all regions of the lowland Maya area, and our work never got much beyond the initial region, so the final test of the worth of the procedure did not come about, but I now doubt whether such a survey could have accomplished all that was hoped for it. The major difficulty, of course, is that the examination, no matter how thorough and painstaking, of readily visible remains, and with the constraint of only minor excavation, provides relatively little architectural stratigraphy. Eventually the time perspective supplied by ordered building sequences is needed and I had greatly overestimated the amount of such information that could be expected without excavation. Also lacking without more excavation was much of the cultural debris that might have suggested the erstwhile function of the remains. Had I been a bit more experienced, I should have realized that a survey of the sort called for is best thought of as a preliminary step, albeit an important one, to the intensive work at strategic locations that can indeed provide the answers we sought. So much for concepts and precepts in 1931.

I have already mentioned that fieldwork began in 1932. A study of Maya ceramics by the late H. B. Roberts was just starting, and it had been planned that we join forces—a most excellent arrangement both in matters of economy and in gaining a greater understanding of our problems by means of independent lines of approach. Our work that season, which lasted from late February to early June, with an interruption of almost two months in the early spring, was in what we thought to be the very heart of the Puuc area, Labna and the Sabacche region (see Kidder 1932, pp. 96–97). It was in many ways a discouraging season for me, for I quickly discovered that, even without excavation, the recording of buildings—of architectural features and detail—was a most time-consuming process, and the numbers and sizes of buildings readily available were immense. There is no record of the matter, but I am confident my optimism of the previous year was appreciably reduced.

The Architectural Survey did not enter the field again until late in 1934 but remained there until mid-June of the following year. Once again Roberts and I joined forces. Our plans that season were to map and study the architecture and pottery of the great sites of Sayil and Kabah and to study the not-so-large but seemingly important ruins of Xcalumkin. The geographical coordinates of those sites and of Labna were determined and we were also able to do some sketch mapping in the Xcalumkin savanna (see Pollock 1935). E. M. Shook, who went to Sayil at the end of November 1934, a month ahead of Roberts and me, made the map of that site and took astronomic observations to determine the geographical coordinates of the ruins mentioned above. He also mapped Kabah, assisted by the late A. S. Trik, who joined us in mid-March, shortly before Shook left to perform other duties. The sketch map of Xcalumkin is the work of Trik. Plans of structures and groups of structures were of course made as the mapping progressed and are attributable to Shook and Trik, as indicated above.

The 1936 field season, which lasted from early March to mid-June and was again joined by Roberts, was somewhat different from those of earlier years. The greater part of the season was devoted to a fast-moving reconnaissance with stops of only a day or two at any one site. The southern ruins in Yucatan, Huntichmul, Chacbolay, Kiuic, Chacmultun, and Xkichmook, were visited, as were Xculoc, Chunhuhub, and Itzimte across the border in Campeche (see Pollock 1936b). For about a month, from mid-March to mid-April, our reconnaissance was in the Chenes region, a territory outside of the area covered here and previously reported on (see Pollock 1970). The end of the season, from the beginning of May to almost the middle of June, was spent at the great site of Uxmal with an excursion of a single day to Nohpat.

The last full season of work by the Architectural Survey came in 1940 and lasted from the end of January to early June. Owing to illness Roberts had been forced to give up his studies of Maya pottery and, except for a week's work at Oxkintok by the late G. W. Brainerd, who had taken over Roberts's work (see Brainerd 1940), the Architectural Survey did not have the benefit of parallel researches in pottery. I was accompanied, however, during the entire season by E. M. Shook, and most of the maps, plans, and other architectural drawings of that year are attributable to him.

Our plan of work for the 1940 season was to make a relatively thorough study of the great site of Oxkintok and its environs, where we stayed from mid-February to mid-March and returned for a few days late in May, and later to carry out a reconnaissance of ruins beginning a short distance across the Campeche border south of Oxkintok and continuing south to the approximate geographic parallel of the city of Campeche. This was a territory that was for the most part archaeologically unknown, and we had sent two of our most experienced laborers into the region the previous winter to search out sites. The area turned out to be amazingly rich in ruins (see Pollock 1940); and one need only turn to the Campeche section of the Table of Contents to see the number of sites examined, only a few of which were previously known. Although we suffered from a glut of ruins, the season was most informative and probably shed more light on the origins and development of Puuc architecture than the three previous seasons combined.

Following World War II and during my brief return to the affairs of the Architectural Survey, I discovered some gaps in my records that seemed of enough importance to merit a short trip into the field. Consequently, I spent March and about half of April 1948 in Yucatan. Most of the time I was at Uxmal, which I used as a base for trips of a day or two to the ruins of Huntichmul, Kiuic, and Xculoc (see Pollock 1948). This short season of 1948 to all intents and purposes ended the fieldwork of the Architectural Survey, and it was some years before I could again give much thought to that project.

I think I should say something about the technical aspect of our operations in the field. In the first place we quite rigidly limited ourselves to an absolute minimum of excavation. Not only did our contract with the Government of Mexico specify "minor excavations," but our objectives and schedules were such that we simply could not give the time needed for digging of any but the most minor sort. As any archaeologist knows, once you stick a spade in the ground you run the chance of grabbing a bear by the tail and, instead of moving a few shovelfuls of debris as originally planned, you are soon scratching your head to know where to stop an excavation that seems to be getting out of hand. In spite of such hazards, the vast majority of our probings consisted in rolling away some stones to locate the corner of a building, a room, or the jamb of a doorway, digging a shallow trench to uncover a step or a base molding, and in one way or another employing small excavations to uncover architectural details that seemed necessary to an understanding of the structure but did not involve the moving of large amounts of debris.

I doubt that our maps, plans, and other drawings need much explanation. The maps of Sayil (fig. 164) and Kabah (fig. 281) were surveyed with transit and stadia rod and plotted at a scale of 1:1000 with contour interval of 1 m. I believe these maps are accurate in all major features. What inaccuracies there are, I suspect may concern precise orientation of structures. The maps are incomplete in that they omit a good number of small constructions, presumably house mounds, at Sayil and even more at Kabah. This was done consciously to speed up the mapping, which seemed to be consuming more time than we could afford, and it provides another indication of how we tended to exclude the inconspicuous building remains from our architectural study. The map of Labna (fig. 3) is based on that of E. H. Thompson and C. H. Paige which, according to the legend, was made by "Clifton H. Paige, Topographical Engineer," and here again I see no reason to doubt the accurate location of all major features. The same may be said of the Tulane University map of Uxmal, surveyed by R. H. Merrill, which is reproduced here (fig. 388). The sketch maps, several of which are included here, vary considerably in thoroughness and in amount of detail, but in no case is any great accuracy implied. The map of Oxkintok (fig. 477) is the most detailed and probably the most accurate (see Shook 1940, p. 166, for mapping procedures).

Plans, sections, and elevations of buildings and groups of buildings represent measurements with steel tape unless labeled "sketch." I believe that conventions used in the drawings, showing what was standing and what restored, are standard and obvious. In a sense, most of the drawings are restorations in that they assume straight lines and flat surfaces whereas this is true of only the finest Maya masonry, the great preponderance of which shows many irregularities. Orientations of structures were for the most part obtained by prismatic compass, the major exceptions being at Sayil and Kabah where transit and stadia were employed in the course of the mapping. Directional arrows on plans are shown in relation to true north except where otherwise indicated. In this connection I should mention that magnetic declinations from true north have been ascertained at Labna (6°52′E in 1935), Sayil (6°58′E—1934), Kabah (7°11′E—1935), Uxmal (6°45′E—1930), Oxkintok (7°26′E—1940), Cumpich (7°24′E—1940), Xcalumkin (7°14′E—1935), and Kanki (7°12′E—1940). One or more of these sites is not far distant from any of the ruins whose plans we present, with the possible exception of the extreme southeastern ruins, where we are in any case dependent upon previously published drawings; I have assumed, I hope justifiably, that one can estimate the magnetic variation applicable to any of our plans within an error of 15 minutes of a degree, which is about as close as one can plot the orientation of drawings on the scale shown here.

The photography pretty much speaks for itself. It is far from professional, and I must accept whatever blame or occasional praise is due, except for the season of 1940, during which Shook took many of the pictures. I remember with amusement some of our contrivances—such as reflectors of aluminum foil or sections of gasoline tins to get sunlight into a dark room or to bring out the low relief of some carving, and the use of Coleman gasoline lanterns for night photographs of sculpture. These were the years before the miniature camera using 35-mm film came into such universal use and, of course, before color film. My standard camera was a Zeiss "Juwel," employing a 9 × 12 cm film pack and invariably mounted on a tripod. This now seemingly heavy and bulky instrument appeared to me light and compact compared to the great old machines using 5 × 7 inch cut film, on which I had been initiated to archaeological photography. Supplementing the Zeiss Juwel was a smaller camera, at one time an Exacta that used 4 × 6.5 cm roll film and carried a focal plane shutter of some rubberized material that proved to be disastrous in the tropical climate, more often a 6 × 6 cm Rolliflex. The smaller camera was usually hand held but occasionally was mounted on a tripod for long exposures. Most of the film processing was done by commercial establishments in Merida and, it seemed to me, with adequate results.

It may be helpful to give brief attention to the organization of the descriptive sections of this book. I have had to be somewhat arbitrary in my grouping of sites under regions or areas, in the order in which regions are presented, and the order in which sites are taken up within any region. Particularly arbitrary is my grouping and order of presentation of what I call Other Sites. This is a loose category of ruins, including both sites that I have not visited and know only through published or other secondary sources, and sites that I have visited briefly but about which I have little information. It is not a measure of size or importance. Some of the sites in this category are probably large, and some are unquestionably more important than ruins to which I give more extensive treatment because I have more data.

Broadly speaking, the order of presenting the ruins follows the course of our fieldwork, but with a good many exceptions so as to achieve a more orderly geographical arrangement. Although there are unquestionably a number of other ways in which the material might be presented—and in this sense my scheme is arbitrary—I have followed the present arrangement for the following reasons. In the first place, there is immediately presented a rather large body of material from the heart of the Yucatan ruins (Labna and the Great Cities), a region often thought to show an architecture most purely Puuc in style. This was, of course, one of the reasons why our survey started in that area. Secondly, there are provided at the outset the full and detailed descriptions of construction practices and building techniques so carefully recorded during our early fieldwork. Later, much of our survey was of necessity more hurried and, rather than endlessly repeat the detailed description of standard and by then well-known practices employed throughout Puuc architecture, we resorted to such terms as usual, normal, typical, and the like. This is reflected in the text, and if it mystifies and annoys the reader who dips into the book without reading this preface or early descriptive sections, I can only offer as excuse that to have made this overly long and often repetitious book even longer and more repetitious seemed to me the greater sin.

I think of this volume primarily as a reference book and I have tried to make it easy for the reader to find whatever interests him. To this end there is extensive use of headings and subheadings and, where shortness of text makes the use of subheads cumbersome, the topical order of the material remains the same. Should there be trouble in finding any site in the text or through the Table of Contents, a finding list in which the ruins are arranged alphabetically will be found at the back of the book.

Principal sources in the literature are given under the heading References at the end of the introductory material that precedes the description of each site, except in the case of Other Ruins where such material, if it exists, is cited after the description of the site. The choice of what source is important is naturally subjective—other than that architecture is the central theme—and I may have given too much emphasis to early writings. I have done so because they often include descriptions or identifications of once-standing structures that have since fallen or of architectural details that no longer exist. References of a less general nature, usually dealing with some specific feature of a site or building, are of course given in the proper place in the text. I have made it a point to rely heavily on previously published material by citing references to text and illustrations, rather than republishing photographs and drawings. Annoying as this may seem at times, the saving in cost of publication is too great to do otherwise.

It is sad to think that, of all those who contributed to the Architectural Survey, so few are left to receive acknowledgment of their help. One of the less pleasant aspects of writing this book has been the ghosts that rise from page after page of my diary. I have already mentioned the urging of the late S. G. Morley and the late A. V. Kidder that an architectural survey be undertaken. In a sense, I suppose, they should be thought of as authors of the program, although the detailed planning and execution of the work must clearly be my responsibility. Of my companions in the field the late H. B. Roberts and E. M. Shook contributed greatly. Roberts was responsible for much of the original planning of the fieldwork and gave much time to the logistics of our operations. Shook took care of most of the mapping, of the determination of the geographical coordinates of important sites, and in the 1940 season was responsible for a major part of the architectural record. I should like also to mention the work of the late A. S. Trik on the map of Kabah, in which he collaborated with Shook, and in the mapping at Xcalumkin. Although our labor force varied from year to year, the late Pablo Pantoja—major-domo, chauffeur, and cook, Eugenio Mai—foreman, and the late Abruncio Dzib—skilled excavator, were with us through the whole operation and contributed immeasurably. Without them our travels would have been harder, our work less efficient.

I cannot possibly overstate my debt to the late R. L. Roys. Not only did he supply virtually all the etymological information in these pages but he gave unstintingly of his vast knowledge of the ethnohistory and political geography of aboriginal Yucatan.

Professor G. R. Willey of Harvard University, always a source of sound advice, has guided me through the intricacies and pitfalls of obtaining financial support for the cost of publication, and it is fair to say that without his help this book might never have appeared. My thanks to him are profound.

I deeply regret that I cannot name the many residents of Yucatan, the government officials, the owners of haciendas, the merchants, the laborers, who went out of their way to help us in our work. They are far too many to list and I must content myself by saying that almost without exception we were met with friendliness and kindliness and were offered every assistance, often without remuneration and with simple good will. My thanks go to all these people, few of whom, I am sorry to say, will ever see these pages.

I mentioned at the beginning of this preface that the work described here was under the auspices of Carnegie Institution of Washington. All of the fieldwork and nearly all of the cost of preparing the manuscript were financed by them. My debt to the Institution is immeasurable. I also wish to acknowledge the substantial support of the Peabody Museum of Archaeology and Ethnology, Harvard University, in making available its library, photographic files, and numerous other facilities during the preparation of the manuscript.

Last, but by no means least, thanks go to the Anthropology Program of the National Science Foundation for funding the greater part of the cost of publication, the remaining cost being supplied by Carnegie Institution of Washington and the Bowditch Publication Fund of the Peabody Museum.

The art work, the drafting, the general preparation of illustrations for this book have extended over a long time and been the work of a number of people. Miss Avis Tullock has been in overall charge and, besides doing much of the original drafting, has supplied final details to virtually all the maps and drawings. I cannot thank her enough for her knowledge and infinite patience in the execution of this formidable task. Others that contributed to the preparation of the numerous plans, sections, and drawings included here are Edwin Doremus, Walter Green, Arthur Manasalian, Tatiana Proskouriakoff, E. M. Shook, the late A. S. Trik, Nuart N. White, Penrose D. Worman, and Kisa Nogushi Sasaki. The basic preparation of the maps of Sayil, Kabah, and Oxkintok is the work of E. M. Shook, with final details supplied by Avis Tullock. Preparation of the map of Xcalumkin is attributable to A. S. Trik, with final details again supplied by Miss Tullock.

The laborious task of typing the major part of my handwritten and often none-too-legible manuscript fell to Maria von M. Huggins, whose patience and good nature elicit my most sincere gratitude, as do the same virtues of Dorothy Ward, who typed the final sections.

Hancock, New Hampshire
June 1977

THE PUUC

An Architectural Survey
of the Hill Country of
Yucatan and Northern Campeche,
Mexico

Introduction

The Puuc

The *Motul Dictionary* carries the entry, "*puuc:* hill, mountain or low ridge or range of hills like that which runs by Maxcanu, Ticul and Tekax; *uitz:* a high ridge" (Martinez 1929, p. 782). Elsewhere (ibid., p. 906) the Motul gives "*uitz:* high and large ridge or mountain; or craggy rock." According to Roys (personal communication, and see 1943, pp. 176–177, and 1962, p. 75) *puuc* means a range of hills, *uitz* a detached hill.

The term Puuc has taken on several meanings in archaeological writing. In the first place it refers to a chain of low hills and ridges that run southeast from the town of Maxcanu in western Yucatan to merge with the hills of Quintana Roo south of Peto, and south-southwest from Maxcanu to reach the sea some distance south of the city of Campeche, thus forming an inverted V with the apex at Maxcanu (fig. 1). Secondly, the term refers to the archaeological area enclosed by these hills, the southern limits being vague. Thirdly, Puuc may refer to a stage or phase of ancient Maya culture or of ancient Maya history, in which case it carries chronological connotations, and lastly, as a part of its cultural meaning it refers to a style of architecture.

It is possible, indeed probable, that our use of the word Puuc in reference to the area limited by the chain of hills just described is incorrect. Roys (personal communication) felt that this territory, which is made up of many detached hills and ridges, was really uitz country. In support of this position he cites the name Hunuitzil Chac Tutul Xiu, a legendary founder of Uxmal, which he translates "Tutul Xiu, the Chac of the entire Uitz country," and he quotes from one of the native chronicles, "8 Ahau was when the town of Mayapan was depopulated by the foreigner of the Uitzes" (see Roys 1962, pp. 72, 74–75). The foreigner (*dzul* in Maya) of the Uitzes presumably was Tutul Xiu. Within my own experience the natives living or tending their corn fields behind the Puuc ranges do indeed think of that region as Uitz country and only the bordering chain of hills as Puuc. There seems little doubt to me that Roys's thesis is correct, but I nevertheless have not abandoned the term Puuc in favor of Uitz. Puuc is by now deeply embedded in the archaeological literature, and I have felt that to make the change could lead to confusion. Should some purist of the future think otherwise, he has my blessing.

Although the triangular area that we are calling Puuc is rather neatly limited on two sides by the northern Yucatan plain, and one can draw an arbitrary southern border without too much difficulty, the architectural style that typifies this region knows no such bounds. Examples of the classic Puuc style are found scattered over the northern plain at least as far east as Chichen Itza, and very possibly further east, and they extend south and southeast an undetermined distance. The vast preponderance of Puuc architecture, however, is in what might be called the home territory, and this survey is limited to that area. To be exact, our northeastern and western limits include sites at the immediate foot of the hills, not more than a kilometer or two out on the plain, our southern boundary is the approximate latitude of the city of Campeche, and our extreme eastern limits are the approximate longitude (ca. 89° W) of Tzuccacab (frontispiece). These boundaries are, of course, essentially arbitrary. What I have tried to do is to outline the homeland—the indigenous region—of the Puuc architectural style—where it probably originated and almost surely where it developed. Our extreme eastern and southern boundaries are especially arbitrary in that they represent no natural features such as occur at the northeast and west. They are drawn where, in the light of our present knowledge, other cultural forces seem to take over from the Puuc tradition or where the territory beyond is archaeologically too little known to justify its inclusion in the Puuc area.

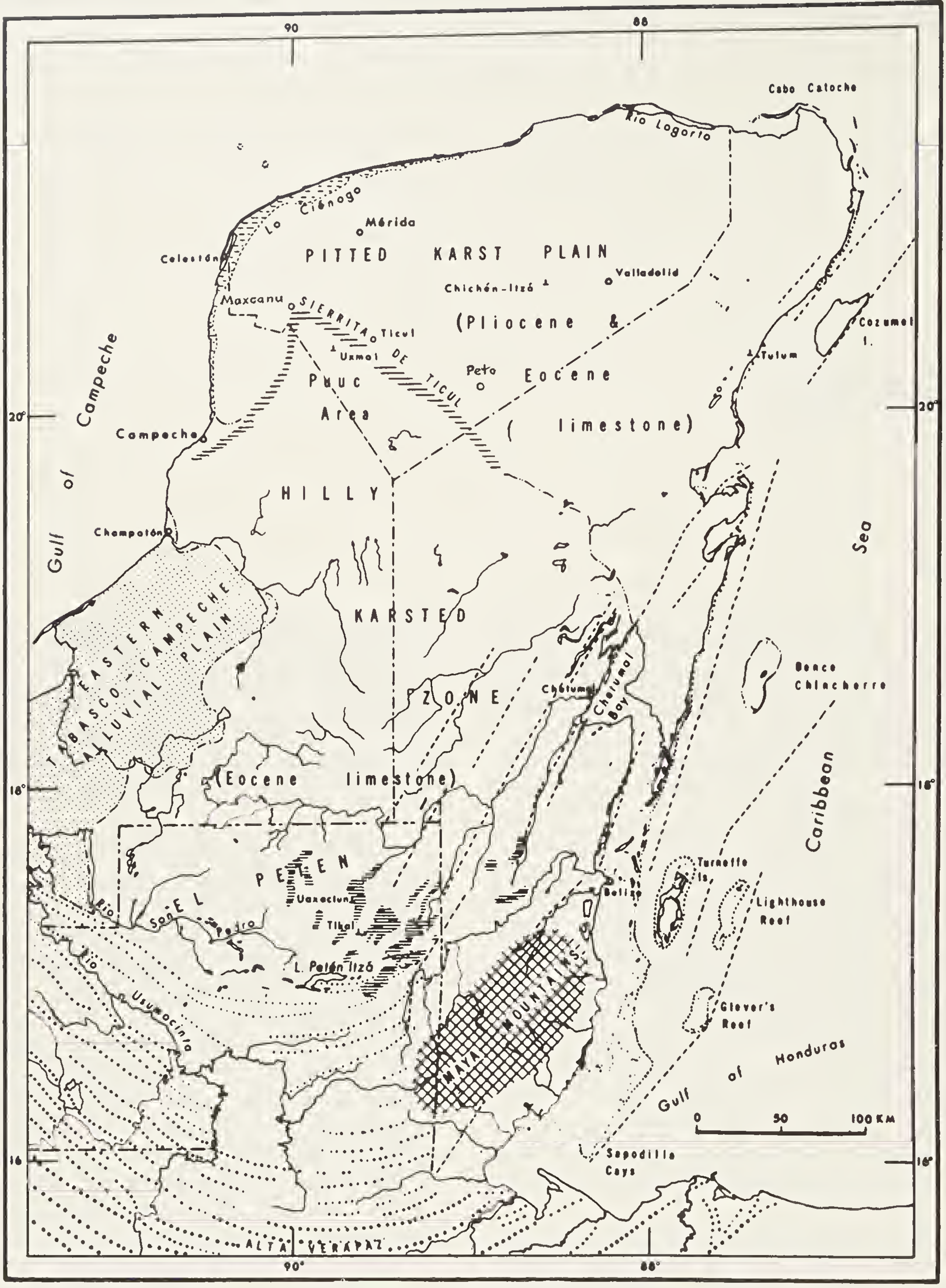


Figure 1. Surface configuration of the Yucatan peninsula (after West).

Environment

GEOLOGY, PHYSIOGRAPHY, WATER SUPPLY, AND SOILS

The peninsula of Yucatan, a generally low-lying land mass that separates the Caribbean Sea from the Gulf of Mexico, has been defined both as a geological province (Maldonado-Koerdell 1964, pp. 5–6) that includes the Tabasco plain to the west and as a somewhat more limited physiographic region (West 1964, p. 40). Using the latter definition, which depends more on surface characteristics and would seem to be more suited to our interests, the peninsula lies within about 16°30′ and 21°30′ north latitude and between approximately 87° and 91° west longitude. This area of about 500 km in either direction is thus entirely within the tropics.

The geological origin and development of the peninsula, according to Maldonado-Koerdell (1964, pp. 22, 24), are essentially due to tectonic factors during Upper Tertiary and Quaternary. The vulcanism so common throughout Middle America seems to have played no part here. West (1964, pp. 70–73) writes:

> In Pleistocene the peninsula was raised out of a shallow sea and tilted westward and northward. The western and northern parts of the platform still lie under 150 m of water, forming the extensive Campeche Banks with their numerous shoals and coral reefs.
>
> Approximately the northern third of the peninsula has an almost level surface derived from nearly horizontal Pliocene strata of limestone, marl and gypsum with elevations of up to 40 m above sea level [fig. 1]. Southward the land rises gradually with occasional weak folds and low cuestaform ridges in highly karsted Miocene and Eocene limestone, forming a low hilly surface of some 130 m elevation. The first significant hills are encountered in the "Sierrita de Ticul," an arcuate ridge (between Campeche City and Merida) that rises to a maximum of 50 m above the surrounding plain. Robles Ramos (1950) believes that the Sierrita represents the littoral of Miocene time and that subsequent folding created the present ridge. In effect, the Sierrita marks the boundary between the flattish Yucatecan Plain to the north and the hilly Campeche area to the south. The highest elevations of the peninsula (up to 350 m) occur near its center in eastern Campeche, and hilly terrain representing an advanced stage of limestone solution extends into the Peten of northern Guatemala. . . .
>
> Most of the Yucatan Peninsula is characterized by a karstic surface. In its northern part there are no surface streams, for rainwater sinks quickly through the porous rock to form underground channels. The surface is pitted with hundreds of the famous *cenotes* (from the Maya *tz'onot,* meaning well), or a type of sink that results from the caving of surface rock above subterranean stream channels. Robles Ramos (1950) distinguished two types of sinks in northern Yucatan: (1) the small funnel-shaped one of the normal doline type *(resumidero)* and (2) the true cenote, round or oval, 10–30 m in diameter, vertical walls, with a visible water surface at the bottom. . . . In addition, shallow solution depressions, called *aguadas,* which usually contain small intermittent or permanent ponds, dot the peninsula's surface. As both the cenotes and aguadas are the main sources of water supply in northern Yucatan, they have been significant factors in the location of ancient and modern Maya settlements. . . . Other important solution features include underground caverns and caves of various sizes and stages of development. Small caverns occur in the more level northern part of the peninsula; large caves are found in abundance within the cuestaform ridges, such as the Sierrita de Ticul and south thereof in the Campeche hills (Cole 1910; Robles Ramos 1950; Hatt 1953). Replete with dripstone forms (stalactites, stalagmites, etc.), hidden chambers, and underground lakes or streams, such caves have been utilized as places of refuge during times of political stress as well as for baths and water supply in normal times.
>
> Bare, fluted limestone is exposed over large areas of northern Yucatan; pitted and scarred by solution depressions and small ridges (lapiés or karren) that are often edged with sharp chert or flinty particles, the surface presents serious obstacles for travel, despite the apparent flatness of the landscape.
>
> In many parts of northern Yucatan the best soils available for cultivation have accumulated through rainwash in scattered pockets, or *hoyas* on the limestone surface. Such soil pockets are larger and more abundant in the Sierrita de Ticul and in the hills of northeastern Campeche, often termed the *puuc* area. . . .
>
> The limestone and associated rocks of the Yucatan Peninsula have supplied both the ancient Maya and their modern descendants with various useful materials. Chert and flint in the form of hard siliceous nodules found as accumulations in limestone were used anciently for projectile points and cutting tools; as this material breaks with a concoidal fracture, sharp cutting edges can be shaped from cores by pressure flaking. The Maya had building stone in abundance, for the soft, easily quarried limestone of the peninsula hardened on contact with air. They also burned limestone to make quicklime, which, mixed with a calcareous sand *(sascab)* and water, produced a mortar for building material and a plaster for fresco murals and stucco modeling.

My only comment on this excellent description of the northern part of the peninsula, from which I have omitted a few passages not directly concerned with the physiography of the region or with the Puuc area, is that the Sierrita de Ticul is of course the Puuc ranges we have already discussed, and that I should estimate their maximum height above the plain nearer 100 m or even 150 m than the 50 m stated by West.

The peculiar underground drainage of the highly karsted northern Yucatan peninsula described by West is elaborated upon by Tamayo and West (1964, pp. 86, 99–100). Besides the absence of surface streams, and their replacement by cenotes, aguadas, and caves as sources of water, there are natural pockets or basins in the limestone, called *sartenejas,* that fill with rain water. Most of these hold water only during the rainy season, or for a short time thereafter, but some are very large and I have seen and heard of sartenejas that reputedly held water throughout the year. Tamayo and West (ibid.) also mention incipient stream channels that carry water only after heavy rains, and the remarkable offshore fresh-water springs, called *pozas,* along the north coast of Yucatan.

There are few, if any, true cenotes in the Puuc area, and the water sources that are sometimes called cenotes, such as those at Cumpich (p. 456) and Bolonchenticul (p. 554), are more properly caves. The primary natural sources of water in the Puuc region are aguadas and caves supplemented by sartenejas. In the southern part of the area, on the borders of the Chenes region, there are shallow wells (e.g., Bolonchenticul, p. 558), some seemingly natural, some anciently dug by man (see Pollock 1970, p. 7), and just north of the city of Campeche there seems to be a short surface stream, the Rio Verde or Rio Homtun, brackish in the dry season but running with fresh water during the rains (see Acanmul, p. 537, and Cansacbe, p. 543). As will be seen in later pages here, some, probably many, of the aguadas were in part artificial, and most important of all as sources of water in ancient times were the innumerable underground cisterns known as *chultuns.*

Stevens (1964, pp. 278–282) classifies the soils of northern Yucatan as Terra Rossa of the Laterization-Process category of zonal soils. He explains that "the Terra Rossa soils of Yucatan . . . are formed under scrub-forest vegetation in a warm wet-dry season climate and retain a high content of available calcium as a heritage from the limestone parent material." Citing Ortiz, Stevens (ibid., pp. 303–304) further observes that the soils of northern Yuctan can be classified according to terms employed by modern Maya agriculturists, such as *tzekel* (rocky and infertile land), *kancab* (reddish earth), *ek-luum* (black earth), *cacab* (high lying fertile land), and *sahkab* or *saccab* (white earth). The most widespread and presumably most important families and series of soils named by Ortiz (1950, pp. 254–278) are Tzekel, Kankab-Tzekel, Kankab, and Eck-Lum, all of which are present in the Puuc area. Ortiz analyzes these soils and finds that for the most part no addition of fertilizers is required except for occasional deficiencies of phosphorus in the Kankab-Tzekel family and of manganese and potassium in the Tzekel family (ibid., pp. 285–286).

In his description of the physiography of northern Yucatan, West (see p. 3) observes that pockets of the best soils available for cultivation are larger and more abundant in the Puuc area than elsewhere. Ortiz (1950, pp. 251–252) agrees that that region offers better agricultural opportunities than the northern plain but feels that its potential has been exaggerated. Whatever the truth of the situation, it is generally believed by the Indians that work the soil today that the Puuc lands are agriculturally most desirable, and farmers travel long distances to plant their corn fields there. Considering the critical nature of the water supply in the area, it is difficult to think of any factor other than the fertility of the land that would have led to the intensive occupation that is indicated by the innumerable remains of ancient settlements.

CLIMATE

The climate of the Yucatan peninsula is, of course, determined by certain natural conditions. Chief among these are its location in the tropics, its generally low elevation and flat terrain, the warm ocean waters that surround it on three sides, and the prevailing easterly winds. Vivó Escoto (1964, p. 192) explains how the easterly trade winds bring about a summer rainy season and a dry season in winter and spring. Other natural phenomena affecting the climate of Yucatan are the northers, or *nortes*—cold fronts that occasionally sweep down across the Gulf of Mexico, usually during the winter months, producing rain and strong winds—and the hurricanes that from time to time sweep in from the Caribbean with their attendant heavy rains and damaging winds during the months of August, September, and October (ibid., pp. 193–195). Unlike the weather in most temperate climates, in which the highest temperatures are experienced during the summer months, the maximum temperatures in Yucatan occur at the height of the dry season in March, April, and May.

According to the Koeppen classification, the climate of northern Yucatan is Aw, or a humid tropical climate in which the average temperature of any month in the year is not less than 18°C., with a dry season during the winter. Mean annual rainfall in the northwestern part of the peninsula, excepting the extreme northwest corner, is between 500 and 1000 mm (ibid., p. 201 and fig. 10), but I suspect that much of the Puuc area, and certainly its southeastern region, is near the upper limit or perhaps somewhat over it. There is, moreover, relatively low variability in the annual rainfall, a matter of importance to the agriculturist. The period of maximum precipitation is July and August, and that odd weather phenomenon known as the *veranillo* —a short dry period of a week or two—is reputed to occur in August. The dry season runs from about November to May when, as already explained, the only precipitation is from the occasional norther (ibid., p. 212). Mean annual temperature of northern Yucatan is between 25° and 30°C., and I have personally observed a maximum of 40.8°C. and minimum of 4.2°C., the latter recorded at the ruins of Sayil in January 1935.

VEGETATION

Wagner (1964, pp. 221–223), on somewhat theoretical grounds, assigns the vegetation of northern Yucatan to the Dry Evergreen Formation Series but cautions that "there are formations reminiscent of frost-conditioned North American types." In a fine description of the dry forest of Yucatan, Bequaert (1933, pp. 513–514) observes that it is not xerophytic, as might at first be thought, but is tropophytic of the type found in the tropics where there is a pronounced dry season. He goes on to describe how most shrubs and trees drop their leaves after the rains, passing the dry winter season in a dormant condition, but quickly put on new leaves with the first rains so that "the landscape changes from a picture of desolation to one of tropical luxuriance." Lundell (1934, 1938), who has traveled extensively throughout the Yucatan peninsula, also observes that the forests of northern Yuctan are deciduous. Since the rainy season begins in May or June, it is at that time that the sudden and dramatic greening of the forest takes place.

Bequaert (1933), Lundell (1934, 1938), and Wagner (1964) agree that, because of agriculture, fire, and hurricanes, most of the present forest of northern Yucatan is secondary growth. Seemingly referring to the northern plain near Chichen Itza, whose vegetation does not differ grealty from that of the Puuc area, Bequaert (1933, p. 514) estimates that the height of the forest averages 8 to 20 feet (2.4–6.1 m), whereas Lundell (1938) says 10 to 25 feet (3.0–7.6 m). This would seem to correspond most closely to Wagner's (1964, p. 258) Evergreen Bushland: evergreen shrubs or small trees, under 6 m in height. Both Bequaert (1933) and Lundell (1934, 1938) give extensive lists of the flora observed and collected, as well as references to other works on the subject.

In the western and southern regions of the Puuc area, and particularly in the State of Campeche, the forest or bush is often interrupted by large stretches of flat savanna. Writing of the savannas of the Chenes area, where they are larger and more common but otherwise similar to those of the Puuc, Lundell (1934, p. 307) says, "They are covered with grass six feet [1.8 m] high in places, and the burning each year keeps out most other vegetation. Such species as *Phragmites communis* Trin. (1384), *Panicum maximum* and *Panicum purpurascens* are common. These grassy *sabanas* may have been started when natives planted grasses in *milpas,* or they may be the result of soil exhaustion from excessive *milpa* cultivation. The dry climate and annual fires are extending the areas."

We do not know, of course, what the vegetation of Yucatan, and particularly of the Puuc area, was in aboriginal times. In the effort to reconstruct the appearance of the old climax vegetation of northern Yucatan, Lundell (1938) found stands of advanced and relic forest that differed markedly from the secondary growth usually seen. The height often exceeded 50 feet (15.2 m) and relics of *Achras zapota* and other slow-growing hardwoods were present. Lundell (ibid., p. 146) came to the conclusion that "similar forest probably extended at one time as a wide belt across the northern tip of the peninsula, possibly as far south as Peto and Champoton." But to attempt to reconstruct the potential or "natural" vegetation of the country does not answer the question of what it was in pre-Columbian times. There is every reason to believe that the Puuc area was at one time far more heavily populated than now, and one might assume that the old climax forest had been changed or destroyed just as thoroughly as today. On the other hand the ancient Maya could have been better conservationists than their modern descendants and may carefully have saved certain useful trees and shrubs, just as they often save the *ramon* (*Brosimum alicastrum* Sw.) today. A vast number of wooden beams were used in the ancient buildings and remnants of some of them have survived. As identified by our native laborers, these beams are invariably of such hardwoods as *zapote* (*Achras zapota* L.), *chacte* (*Caesalpinia platyoba* S. Wats., or *C. bijuga* L. Brazil), or *habin* (*Piscidia communis* Blake, or *P. erythrina* L.), all listed by Lundell (1938) as being prominent in the advanced and relic forest, but not, I think, characteristic of the secondary growth generally seen now. It would seem then that, in spite of the seemingly dense settlement of the region when the multitudinous buildings of the Puuc area were being erected, the forests provided an adequate supply of hardwood for building purposes, probably a better supply than could be gathered today.

The Hill Country

The preceding pages have dealt with the environment of northern Yucatan in a general way, with occasional references to the Puuc area. Before leaving the subject I should like to focus more narrowly on that region in an effort to give a more intimate and, I hope, clearer view of the country. As one approaches the Puuc hills from the north or the west, they rise sharply from the plain and appear higher than they actually are. This illusion of height is due, I think, to their contrast with the extraordinary and seemingly unending flatness of the plain. Prior to the construction in recent times of graded highways over the ranges, their ascent was a tortuous affair, whether by foot, horse, or vehicle. On many roads the climb was over bedrock that rose steeply in large rounded steps, a sort of cascade of stone, often deeply rutted by the great iron rimmed wheels of the carts that teams of struggling mules and horses have hauled over these roads for centuries. Major crossings of the eastern ranges were at Muna, Ticul, Oxkutzcab, and Tekax, the last not quite so fearsome. At the west there were more roads, one leading into the hills from almost every town along the old Camino Real, and the climb tended to be more gradual though no less rocky.

Once atop the Puuc ranges there opens out a tableland, perhaps 100 m above the northern and western plain, of wooded hills and valleys. From the top of the eastern ranges there is a small descent to the general level of the country behind the sierra; at the west there is for the most part no such drop, the passes there emerging at the level of the hinterland. The roads in the hill country differ from those on the plain mainly in that there are longer stretches of dirt in contrast to the omnipresent bedrock of the plain. The dirt is usually the red earth known as kancab, deep dust in the dry season, a slippery, sticky mire in the rains. The longest stretches of level road are in the savannas, mostly in the southern part of the area, and one can travel several kilometers without the laborious climb over the low but steep ridges of rock so characteristic of northern Yucatan. These relatively smooth stretches of road are, however, but interludes in the generally rocky terrain.

Most typically the Puuc is a country of wooded hills and valleys, of low rises of bedrock, of steep rocky hillsides sloping up to crests or ridges maybe 30 or 40 m above the valley floor, of narrow rocky valleys, of wider valleys with relatively level floors of kancab. And all of this terrain is covered with a thorny growth, almost leafless in the dry season, lush with the rains, of secondary forest of varying age. Occasional corn fields, freshly cut, burned that season, or harvested and returning to bush, interrupt the forest. Less typical in all but the southern and southwestern parts of the Puuc country are the savannas with their broad flat stretches of grass land dotted with *nancen* trees (*Byrsonima crassifolia* [L.] HBK.) and interrupted by occasional low outcroppings of rock that often support a growth of trees in sharp contrast to the surrounding grass. The tall grasses of the savannas, dry and brittle in the winter, are burned each spring, and with the first rains the new pale green grass emerges from the charred stubble, a potent lure for the deer that abound in the forests.

I do not think it useful to describe the colonial or modern culture of the Puuc region in any detail, for it has little bearing on the ancient architecture. Suffice it to say that the area is a sparsely populated farming country dotted with dwellings, hamlets, little villages, ranches, and once grand but now decaying haciendas, and very few larger settlements (e.g., Santa Elena and Bolonchenticul) except the towns that lie along the railroad lines and highways at the foot of the Puuc ranges. The region is crisscrossed by a network of cart roads, paths, and trails that are continually shifting, being abandoned, or newly opened, and recently it has been bisected from north to south by a modern highway that undoubtedly will affect the settlement and industry of the country just as the demise of the haciendas and their great land holdings changed the area half a century ago. Because of the scarcity of water in the region (see above), the deep wells of the haciendas and ranches are of importance to the local population and undoubtedly affect its distribution to some extent, but one of the marked characteristics of this land is the transient nature of its smaller settlements. Equally characteristic are the extraordinary distances farmers will travel from their homes to their fields, often carrying their water supply with them.

This is, I think, enough about the natural and cultural features of the Puuc area. Probably the central fact bearing on the ancient architecture is the overall similarity but local diversity of the terrain, which allowed the builder a wide range in his choice of location and in his larger architectural compositions but did not confront him with large new technical or engineering problems. That these conditions, combined with an ample and readily available supply of building materials, should lead, as we shall see, to a brilliant, prolific, but generally homogeneous architecture is not surprising.

Age of the Ruins

Before closing this introduction, it may be useful to mention the period of the ruins we are about to describe. Chronology is taken up in some detail at the end of the book (see p. 587 ff.) but here, I think, it is sufficient to say that our earliest architectural remains seem to date from the end of the Early Period (Early Classic) and our latest, but for a problematical structure or two and a handful of sculptures, from the Pure Florescent Period (Terminal Classic). According to the Goodman-Martinez-Thompson correlation of the Christian and Maya calendars, this covers a period from approximately A.D. 500 to A.D. 1000 (see fig. 934). As the time of Classic Puuc architecture, often called merely Puuc, is generally thought to be confined to the Pure Florescent Period (A.D. 800–1000), I should explain that within the Puuc area there is a good deal wider range of architectural styles than just the Late or Classic Puuc and that we attempt to cover all known building remains in the area.

THE YUCATAN RUINS

1 · Labna and the Sabacche Region

Near the center of this region is the small ranch of Sabacche, where there is an artificial well, and the inhabitants of the area come from some distance to obtain water during the dry season. Surrounding the ranch are several small ruin sites and the relatively large ruins of Labna (frontispiece). A few kilometers to the west is the great site of Sayil. If there is any validity in the thought that some examples of classic Puuc architecture are more typical of the style than others—meaning, I suppose, that a certain norm within the total range of the style is attained—the ruins of the Sabacche region seem to exemplify this norm as well as any. At all events, Labna has from time to time been referred to as the most typical of Puuc sites, and it seems a reasonable place to begin our description of the ruins.

Labna

ETYMOLOGY

lab, old or ruined; *na,* house (see Roys 1935, p. 3). Variant spelling: Labnah.

SITUATION

Latitude 20°09.6′ N, longitude 89°35.0′ W. Four km south of the ranch of Sabacche (see fig. 2).

TOPOGRAPHY

The central group of structures, which comprises all of the more important buildings and undoubtedly was the civic and ceremonial center of the city, lies on the floor of a small valley surrounded by low hills (figs. 4, 63; and see Size, below).

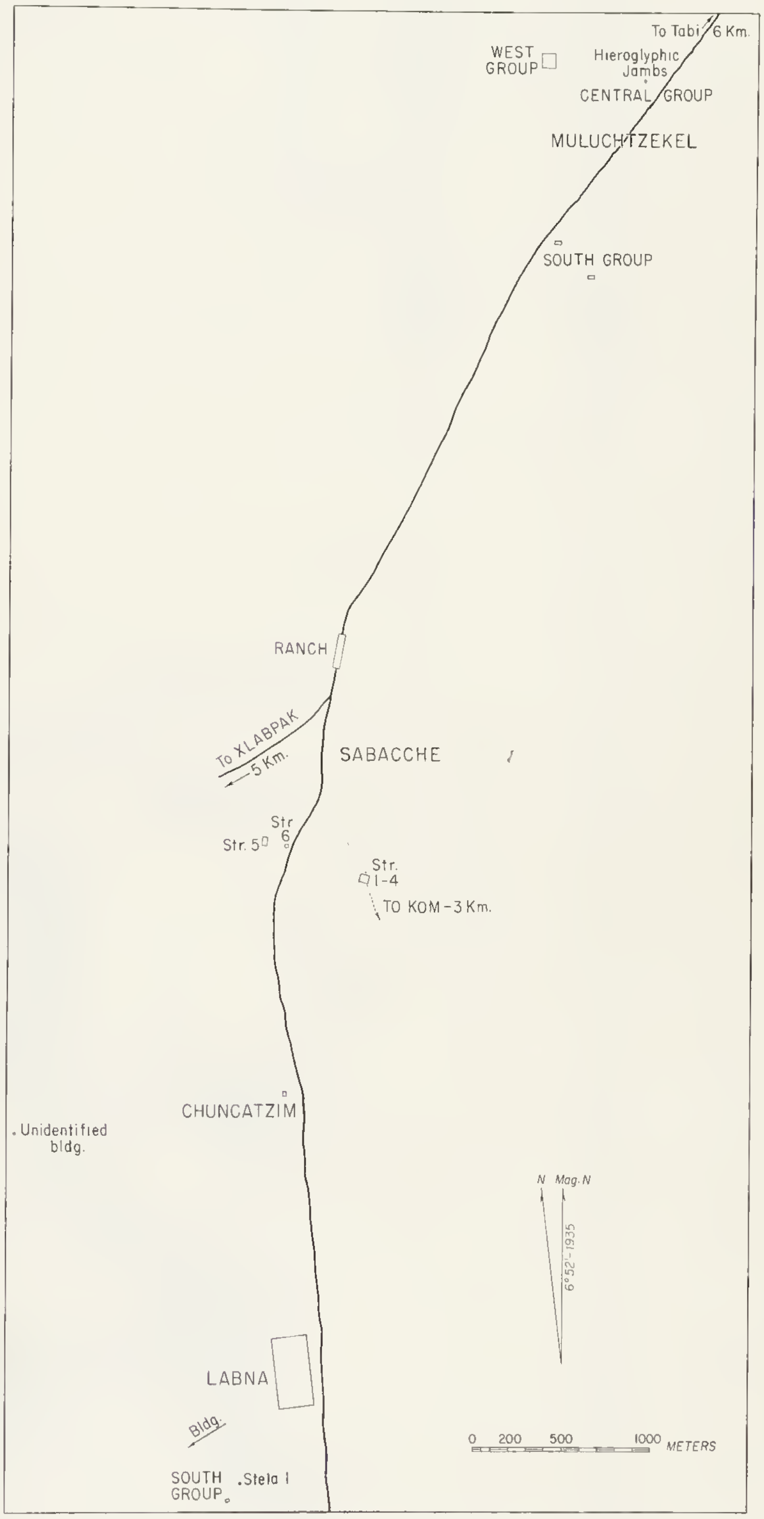
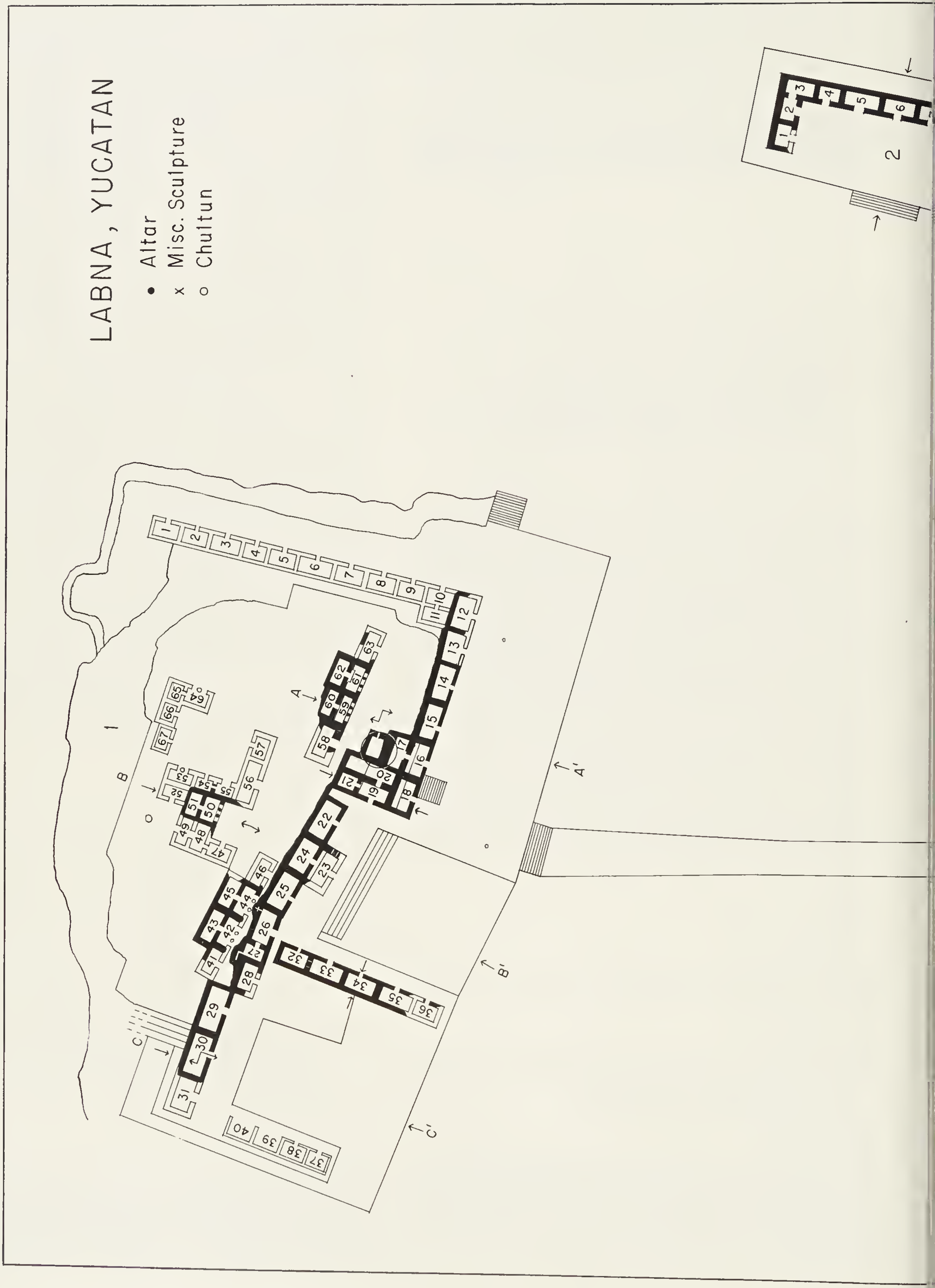


Figure 2. Sketch map of the Sabacche region.

WATER SUPPLY

No natural water supply other than holes in bedrock that hold water during the rains. Nearest permanent natural water supply probably at Chac (see p. 138) about 9 km away. A tremendous number of chultuns (see E. H.


LABNA, YUCATAN
● Altar
x Misc. Sculpture
○ Chultun
1
2
A
A'
B
B'
C
C'

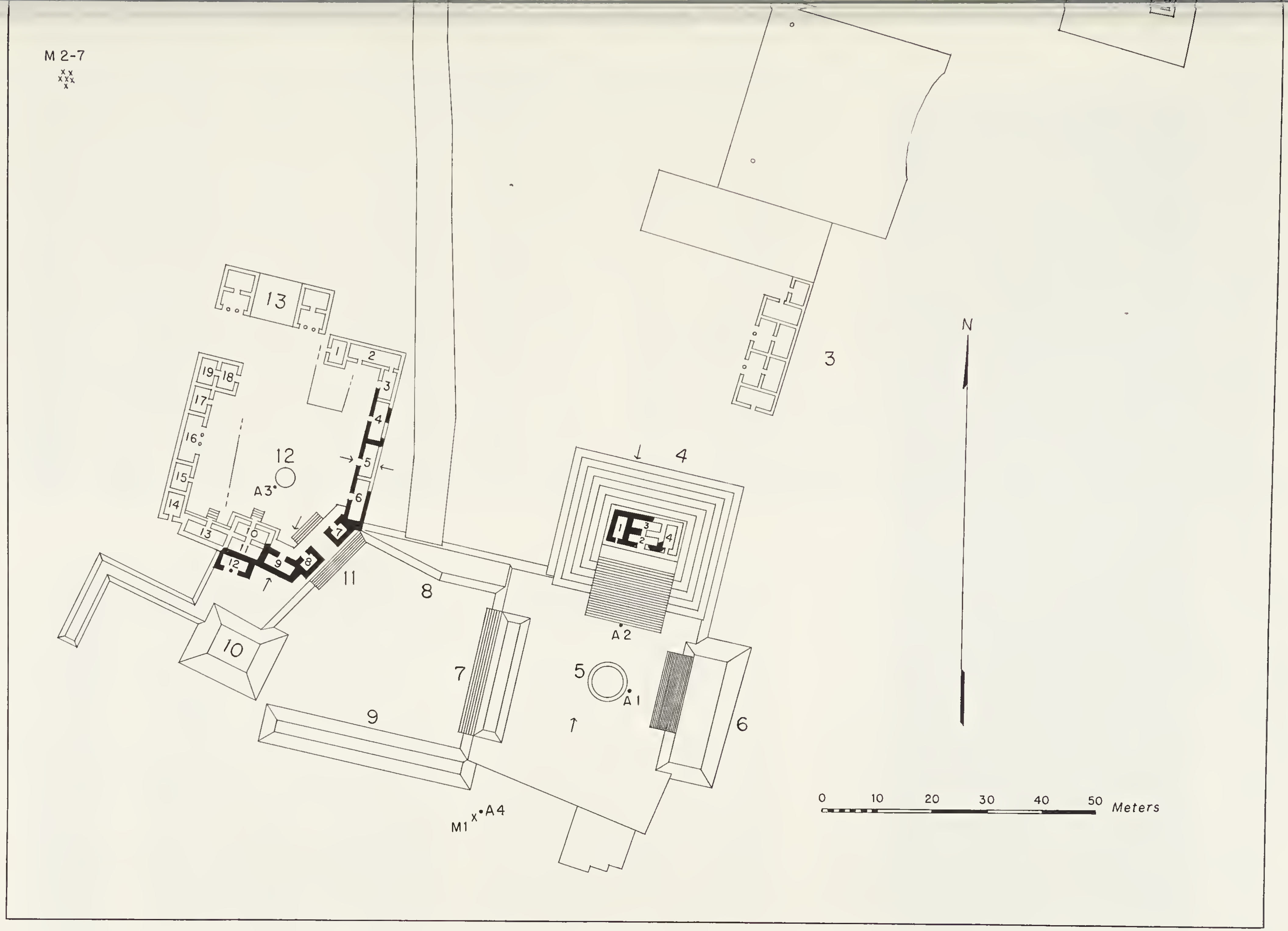


Figure 3. Labna. Map of ruins, based on Thompson and Paige map (1889), with additions and corrections by Pollock (1932).

Thompson 1897, pp. 5–8). Nearest colonial or modern wells at Kom, about 1 km to the east, and at ranch of Sabacche.

MAPS

Map by E. H. Thompson and C. H. Paige, printed in 1889 for Peabody Museum of Harvard University but not published. Greatly reduced versions of this map published by E. H. Thompson (1917), Marquina (1928, opp. p. 66; 1951, p. 750), Reygadas (1928, p. 202), and Pijoan (1946, fig. 737).

Map in this report (fig. 3) based on Thompson and Paige map. Brainerd (1958, map 14) map based on map in this report.

An unpublished map recently found in Peabody Museum of Harvard University, titled Thompson Expedition, 1888–90, Labna, Yucatan, Mexico, is basically the same map as the one first referred to above, except that it covers a larger area and shows a number of house mounds and dwelling-type structures not included on the other map.

SIZE

Principal structures of central group lie within an area of about 300 m north-south by 200 m east-west. There is an almost continuous succession of mounds for 100 m or so further southward, a separate group of buildings approximately 700 m to the southwest, and mounds are known to run off to the northeast and to the west for an undetermined distance. Whether Chuncatzim, somewhat over 1 km away and here treated as a separate site, should be included with Labna is a question. The region is so replete with ruins that single buildings and small groups of buildings appear on every hand throughout the bush, and it is extremely difficult to limit any one site.

CIVIC PLAN

A fairly well-defined civic or ceremonial center (fig. 3). Some instances of courtyard, and even connected courtyard, arrangement, but very little regard for a consistent orientation of buildings, and the site has a straggling appearance as compared to the more compact and orderly arrangement of many of the southern Maya cities. The north-south causeway, connecting Structure 1 (the Palace) and the buildings to the south, is a feature repeated in other Puuc sites. Terracing on the sides of the hills surrounding the central ruins is definitely present (see E. H. Thompson 1897, p. 8), and in most cases probably marks chultun construction and presumably associated house mounds.

See G. F. Andrews 1975, pp. 340–345, for further discussion.

Orientation. Highly variable, differing even between wings of same building. One axis of each structure, however, consistently runs somewhat east of north, as in the case of virtually all Puuc buildings.

DATE

The snout of the mask on the west facade of the East Wing of Structure 1 carries a hieroglyphic date. A number of readings have been suggested (see Morley 1920, p. 358; 1937–38, 1:303; Hissink 1934, pp. 106–107; Beyer 1934, p. 13; 1935, p. 188; J. E. S. Thompson 1937, p. 195). The Thompson (1937) date of 10.1.13.0.0 (A.D. 862), with which Weitzel (1945, p. 30) is apparently in agreement, is favored here.

REFERENCES

G.F. Andrews 1975, pp. 340–356.
Catherwood 1844, pp. 8, 20, pl. 19.
Mariscal 1928, pp. 39–47, 49–51.
Marquina 1928, pp. 65–67.
Marquina 1951, pp. 749–758.
Pijoan 1946, pp. 458–469, figs. 734–748, 752.
Proskouriakoff 1946, pls. 15–16.
Reygadas 1928, pp. 199–209.
Reygadas 1929.
Rickards 1910, pp. 55–57.
Saville 1893.
Stephens 1843, 2:49–60 and frontispiece.
E.H. Thompson 1888, pp. 380–383.
E.H. Thompson 1889a.
E.H. Thompson 1897.
E.H. Thompson n.d.a.
Totten 1926, pp. 160–165.

Structure 1

(Palace)

This large architectural complex (fig. 4) is treated here as a single structure. It might with equal logic be held to be an assemblage of several buildings (e.g., see Sayil, Str. 2B1). Were the function of the structure and of its several parts better known, this distinction might be of some importance, but without that knowledge and simply for the purposes of description, there seems to be little choice between the two approaches.

PLAN, SECTION, AND ELEVATION

See figures 3 and 5; and G.F. Andrews 1975 (fig. 250).

SUBSTRUCTURE

Stairways (see fig. 3). Remains of three stairways, not including that to upper story, are visible.

(1) At east end of lower terrace. Very badly fallen. About 6 m wide, but no estimate of treads and risers possible.

(2) Near center of lower terrace, and leading up from causeway. Badly fallen. Apparently same width as causeway, and treads and risers each of about .30 m.

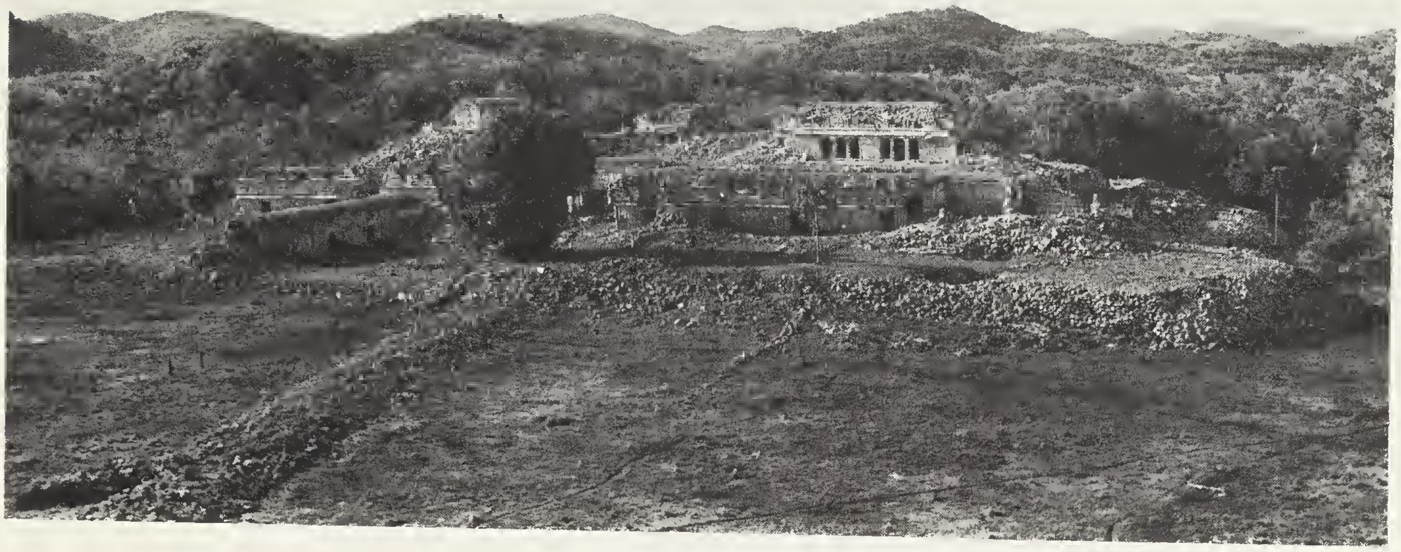


Figure 4. Labna, Structure 1, looking north. Remains of causeway in left foreground.

(3) In front of Rooms 22–25 in Center Wing (see figs. 5b, 45; and see Proskouriakoff 1946, pl. 15). Each step constructed of rubble that presumably was plastered on upper surface in manner of usual flooring, and was faced at front with course of cut and dressed stone. Risers carry batter of about .08 m.

No stairways leading from ground level to low courts before Center and West Wings are visible but impossible to be certain none was there.

Construction. A great part of substructure apparently made up of natural bedrock. This is shown by outcroppings at front of terrace before East Wing (Rooms 12–18) and by broad, natural slope running from ground level to height of second-story platform at rear (north side) of substructure (see fig. 3).

Masonry of retaining walls is of large, roughly shaped but unfaced stone (fig. 6) that supposedly was laid in mortar and was plastered on the exposed outer surfaces, although these conditions are not discernible at present. Fill of platform seems to be of large rough stone, loosely laid.

At northwest, behind West Wing (Rooms 29–31), where second-story platform rises from ground level, are remains of five terraces with vertical walls (E. H. Thompson, 1889a, p. 8, says six narrow terraces each 5 feet high). Also remains of terraces on north side of platform. Stretches of vertical wall of loose stone occur behind the uncompleted Northeast Wing (Rooms 1–11), and are probably in nature of work wall against which superstructural walls of wing were to be built. Lower terrace before Northeast Wing also unfinished, and probably intended to assume line of eastern side of front (south) terrace. Some indications of foundation course on this line. Upper platform never completed as shown by lack of fill at northeast. This not due to fall as there is no collection of debris there. (See Secondary Construction and Building Sequence, below, in connection with these details.)

Large number of chultuns in substructure. Usual case of inhabitants making use of all drainage areas for collection and storage of water.

SUPERSTRUCTURE

NORTHEAST WING (Rooms 1–11)

Plan. See figure 3.

Base Molding. Apparently normal three-member molding with colonnettes in middle member. Same as base molding of lower story of East Wing (see fig. 14).

Walls. Very similar to those of lower story of East Wing (see below), but tendency to somewhat better dressed stone for interior wall facing.

Walls stand at highest point approximately to level of spring of vault. Amount of debris indicates that rooms were never vaulted (fig. 7), thus suggesting that wing was not completed (see Secondary Construction and Building Sequence, below). E. H. Thompson (1889a, p. 10) reaches same conclusion.

Doorways. Simple rectangular doorways with slight tendency to narrow at top. Stone lintels and large jamb stones, each stone full width of jamb. Entirely similar to doorways of lower story of East Wing (see below), but jamb stones tend to be taller, and there are several instances where jamb is formed by a single stone.

Decoration. E. H. Thompson (1889a, p. 11) reports lattice decoration in lower wall zone. Not observed by me but may well have been there.

Upper wall zone apparently never constructed (see Secondary Construction and Building Sequence, below).

EAST WING (Rooms 12–21, 58–63)

Plan. See figures 3, 8.

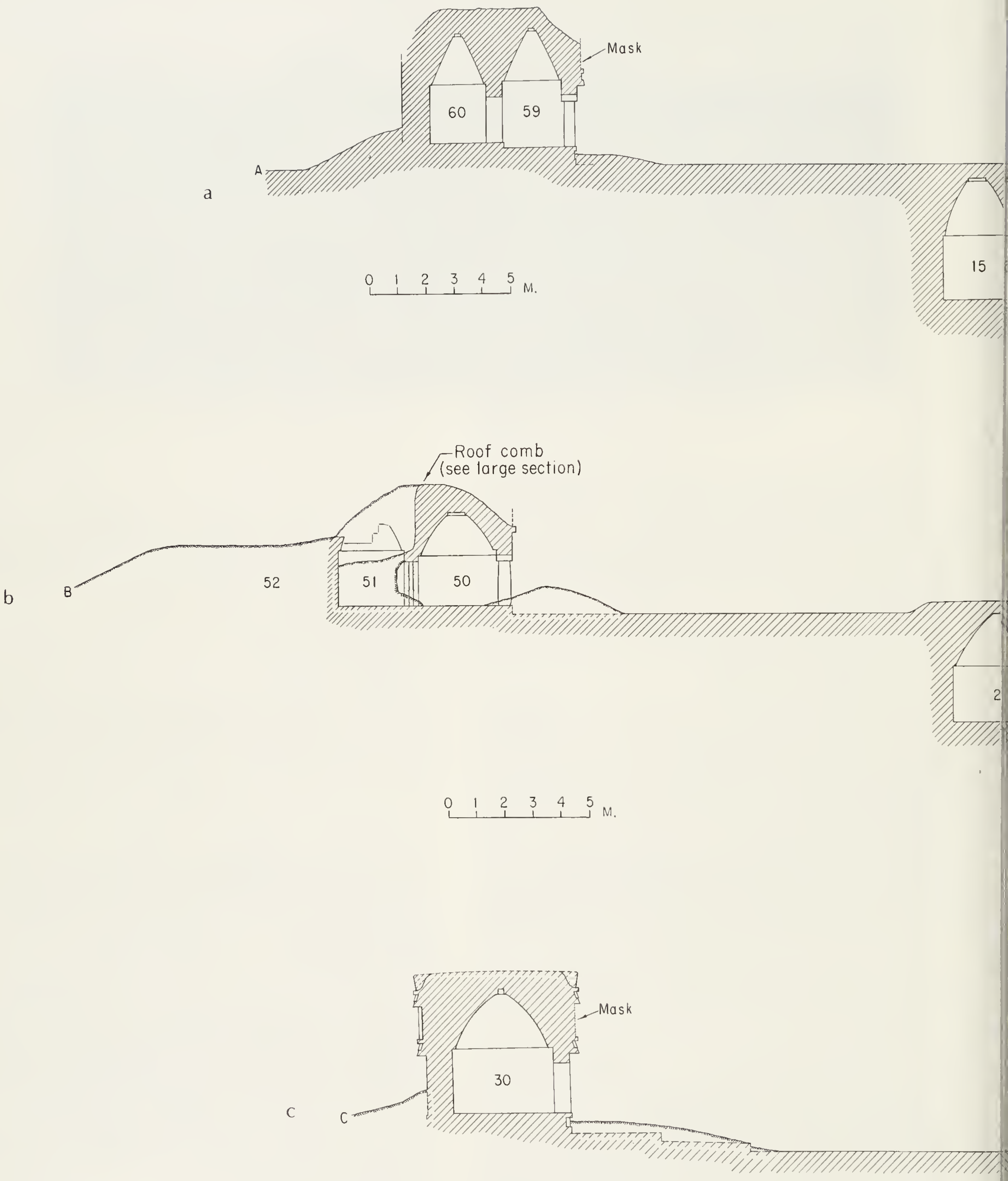
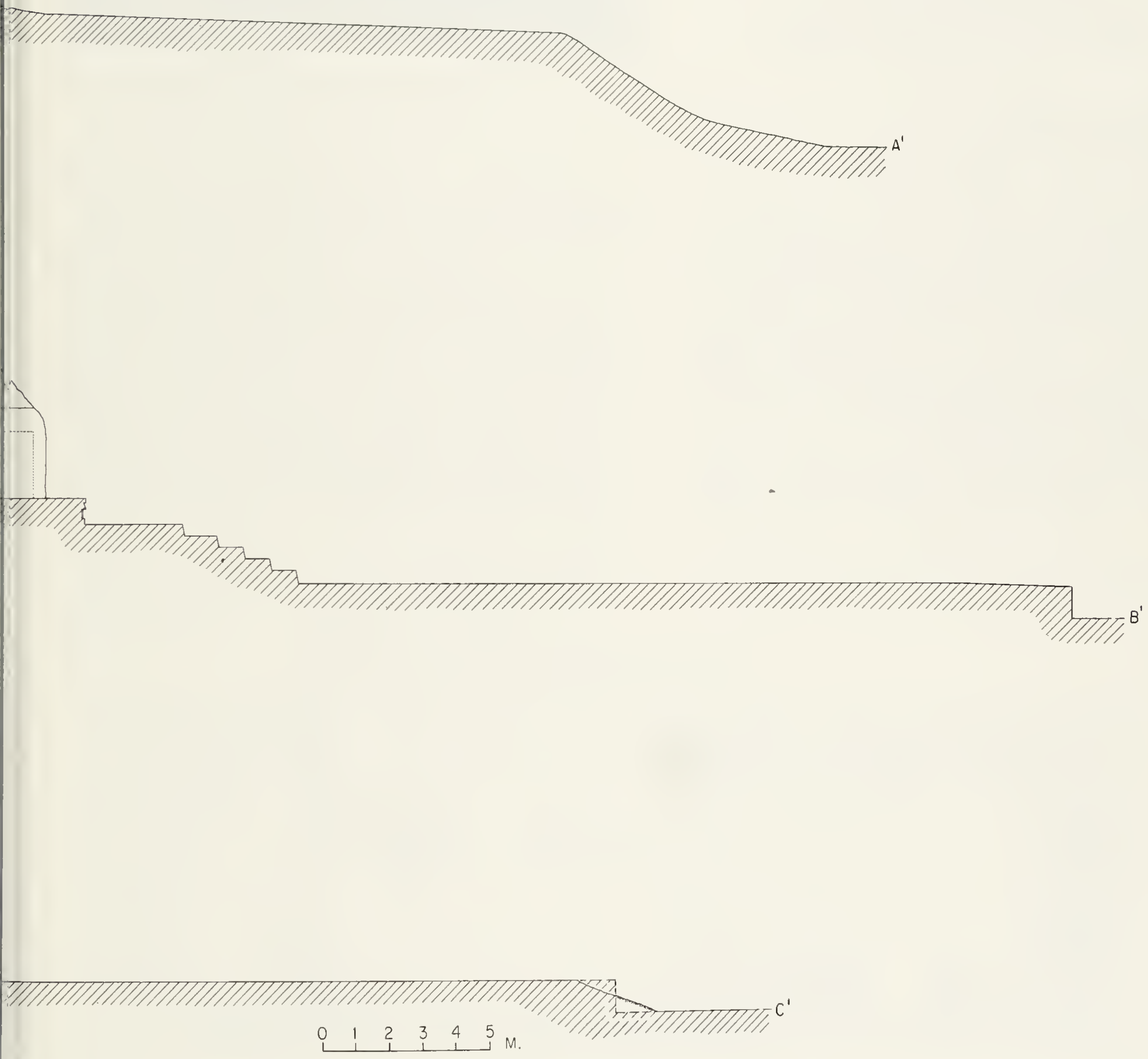


Figure 5. Labna, Structure 1: a, north-south section (A–A′) through East Wing; b, north-south section (B–B′) through Center Wing; c, north-south section (C–C′) through West Wing.


A'
B'
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0 1 2 3 4 5 M.

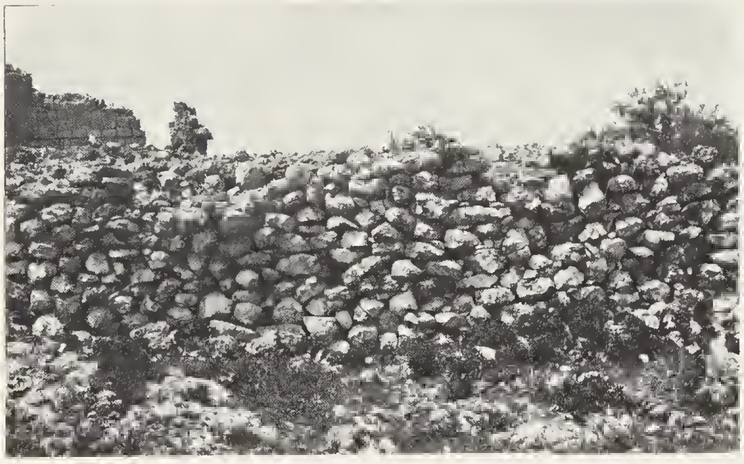


Figure 6. Labna, Structure 1. Wall of front terrace near southeast corner, looking north.

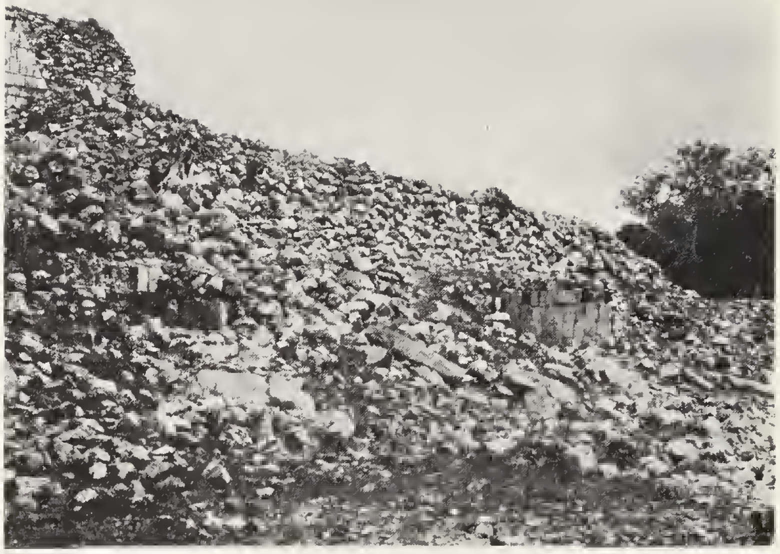


Figure 7. Labna, Structure 1, Northeast Wing, looking northwest.

Sections. See figures 5a, 9–12.

Elevations. See figure 13.

Fallen southeast corner of wing restored as duplicate of standing southwest corner.

Base Moldings. See figures 9–14. Typical three-member molding with colonnettes in middle member on both first and second stories. Noteworthy in sculptured head, or mask, at southwest corner of lower story (fig. 15).

Stairway. In front of Rooms 16 and 18. Leads from lower terrace to second story. Very steep with treads approximately .23 m and risers .29 m. No indication of balustrades. Vertical side walls of dressed stone. Each step a single course of dressed stone.

Upper half of stairway fallen, exposing facade decoration (fig. 17). Stairway obviously secondary to lower story, and supposedly constructed when upper story was added (see Secondary Construction and Building Sequence, below).

Floors. A good deal remaining at places. Colors are white, cream yellow, reddish brown, and possibly black or dark blue (fungus stain?). No red floors observed.

Floor level of rear chamber invariably rises (see sections).

Two floor layers at a number of places. The upper layer very thick, 5–6 cm. Lower layer may be work floor. E. H. Thompson (1889a, pp. 62–64) reports floor 2 feet (.61 m) below present upper terrace floor, and associates

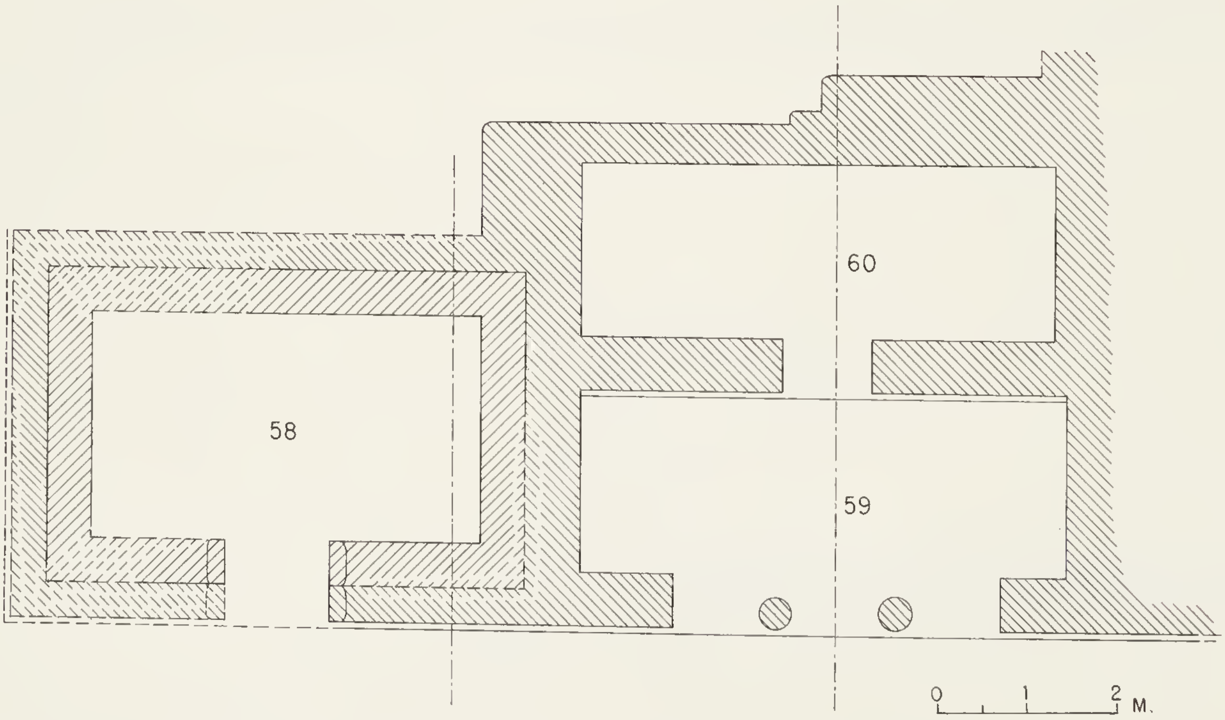


Figure 8. Labna, Structure 1, East Wing. Plan of Rooms 58–60 (see fig. 3).

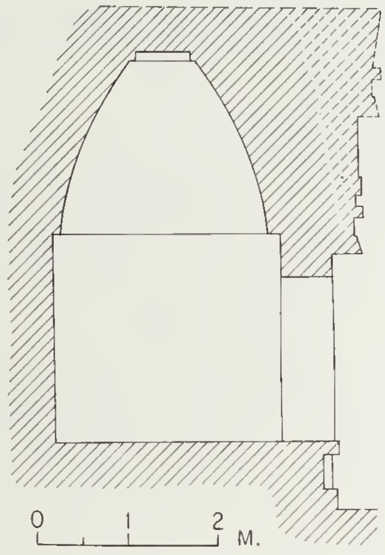


Figure 9. Labna, Structure 1, East Wing. Section through Room 15.

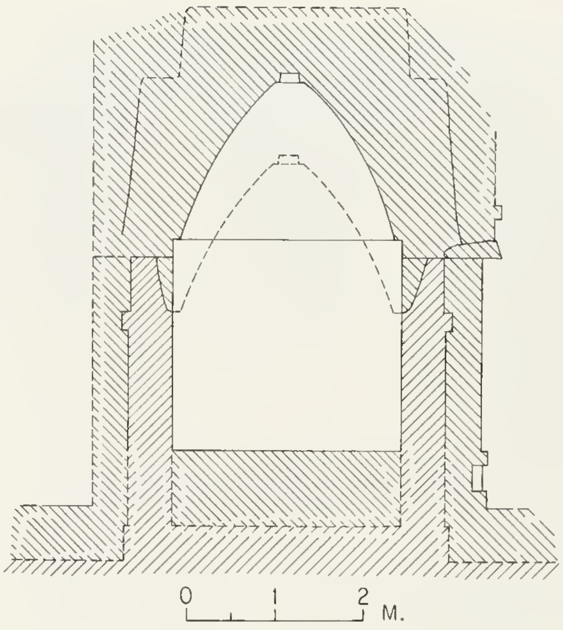


Figure 11. Labna, Structure 1, East Wing. Section through Room 58.

it with early building incorporated in Room 58 (see figs. 8, 11). See Secondary Construction and Building Sequence, below.

Walls. Thickness at jambs consistently about .58 m. Walls usually increase in thickness away from jambs and run .70–.80 m at juncture with transverse walls. Medial wall between front and rear vaults about .80 m. Transverse walls .90 to 1 m.

As usual in most Puuc architecture, outer facing of walls well cut, much better than inner facing (figs. 17, 18, 24a). Stone runs up to .65 m square and probably averages .30 × .40 m. Slight tendency to use smaller stone in upper portion of wall beneath medial molding. Stone of inner facing only roughly faced. Averages around .25 × .30 m. Same tendency to use smaller stone at top of wall.

Transverse walls not secondary to longitudinal ones, but poorly bonded; tendency for front wall to draw apart from joints with transverse walls. Thrust of vault seems to cause this separation, and lack of adequate bonding a serious structural deficiency.

Usual plaster stratum marking completion of lower wall occurs at level of top of outer door lintels and underside of medial molding (see Sabacche, Str. 5, fig. 147a). Level of spring of vault one or two courses above this stratum. Intervening courses apt to be of smaller stone and slightly recessed from face of lower wall.

Walls of upper story generally similar to those of lower story. Tendency to somewhat smaller stone in exterior facing (fig. 22). Some use of outer wall stone (i.e., better

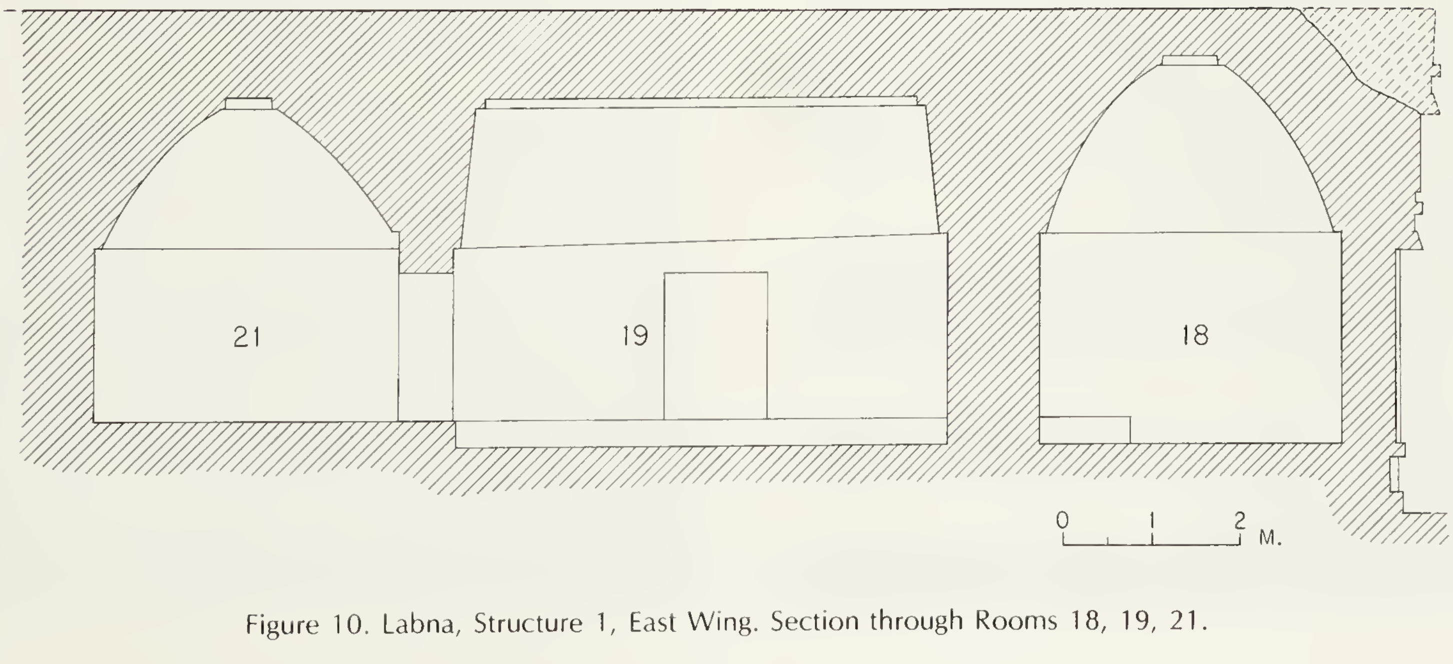


Figure 10. Labna, Structure 1, East Wing. Section through Rooms 18, 19, 21.

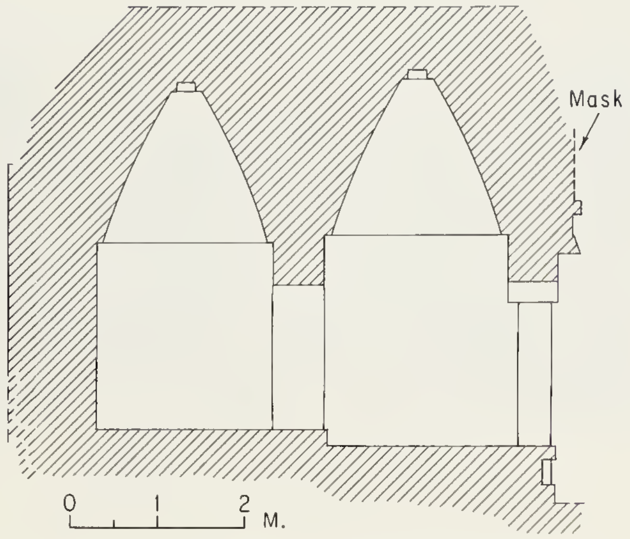


Figure 12. Labna, Structure 1, East Wing. Section through Rooms 59, 60.

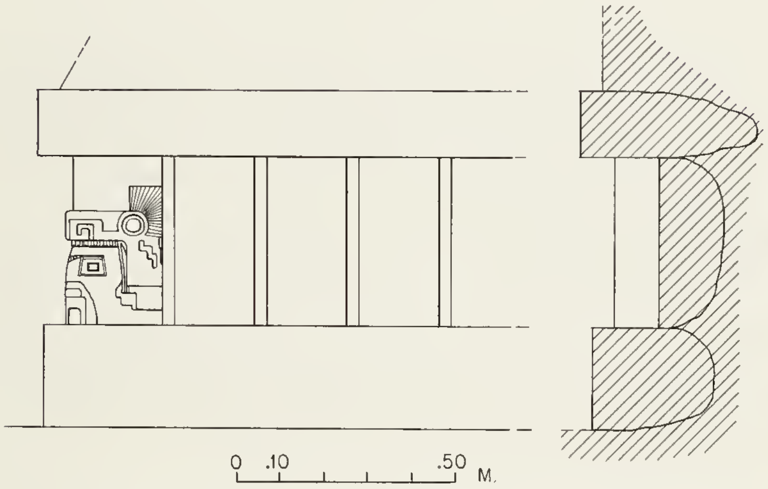


Figure 14. Labna, Structure 1, East Wing. Elevation and section of base molding at southwest corner of lower story.

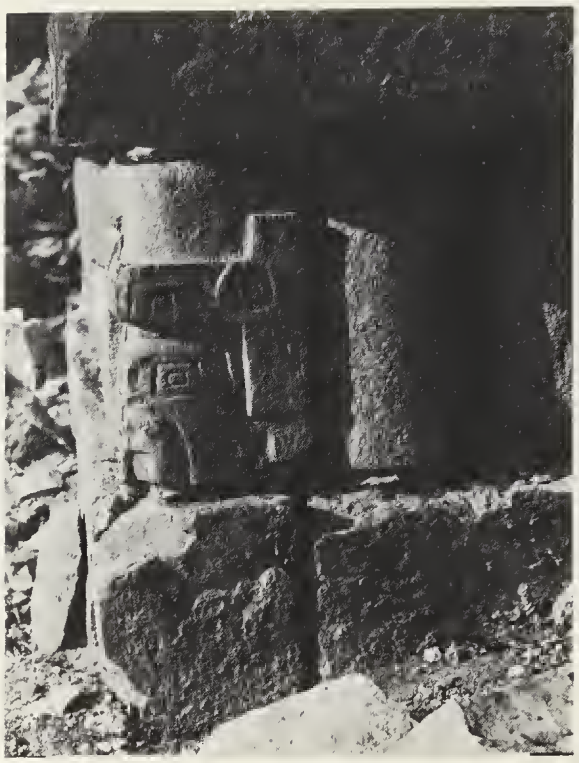


Figure 15. Labna, Structure 1, East Wing. Sculptured head in base molding at southwest corner (see fig. 13a).

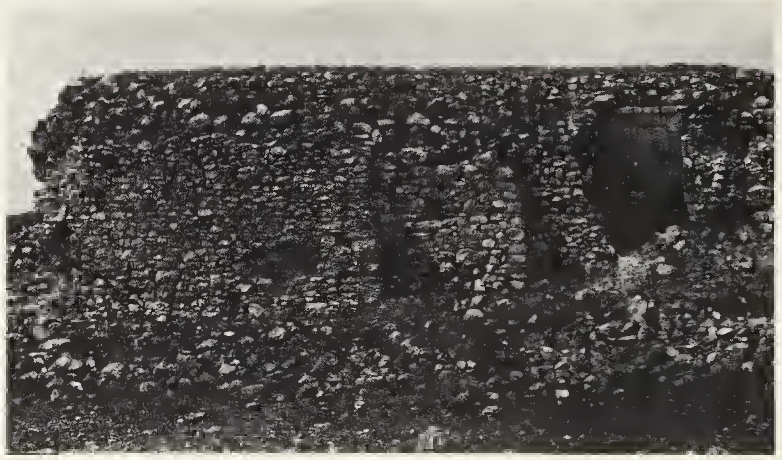


Figure 16. Labna, Structure 1, East Wing. Rear of upper story building (Rooms 58–63), showing rough wall masonry.

cut) in medial longitudinal wall. No faced stone on outer rear wall, and wall surface very irregular (fig. 16, and see Secondary Construction and Building Sequence, below).

Early enclosed walls of Room 58 only .50–.60 m thick (see figs. 8, 11), and make use of rather small stone. Apparently a very small building (see Secondary Construction and Building Sequence, below).

Plaster remaining at many places. Varies in color from white to cream brown to blue or black. Latter colors may be due to weathering or fungus. Plaster very hard and fine, at places several centimeters thick, but apparently in single layer or at most two.

Doorways. Lower story doorways simple rectangular variety with stone lintels (figs. 17, 18). Tendency to narrow at top but not pronounced.

Most jambs are of two or three stones. Stones always extend full thickness of wall, are well cut and dressed on faces and sides, and bulging behind, the hollow-backed variety not occurring. Stones run up to 1.80 m in height and .20–.30 m at edge. Lintels cut same as jamb stones, and difficult to differentiate fallen lintel from full-length jamb stone. Lintels possibly average a little thicker than jamb stones. Outer doorways have height of 1.80 m and run about 1.17 m in width, that of Room 16 being 1.42 m. Inner doorways run .80 m to 1 m in width and lintels are one course higher than outer lintels, owing to rise in floor level.

Recessed inner (north) face of doorway to Room 17 (fig. 19) seems to be adjustment to use of jamb stones .60 m wide in wall .80 m thick. Suggests change of plan

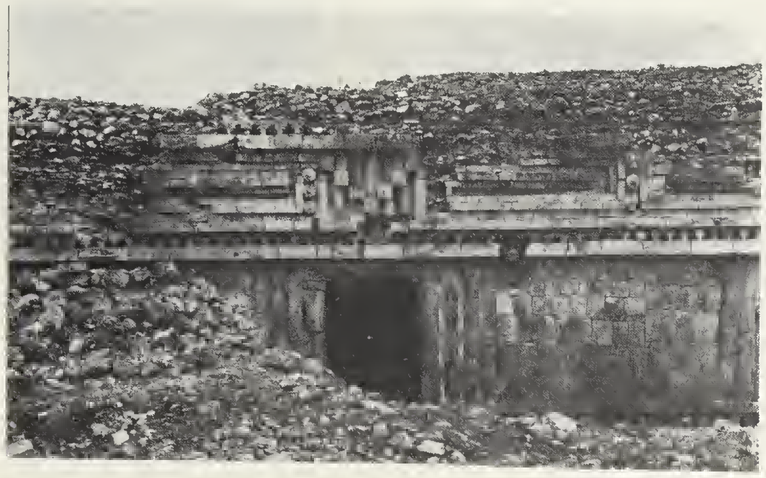


Figure 17. Labna, Structure 1, East Wing. Entrance to Room 16, showing facade decoration and remains of stairway to upper story.

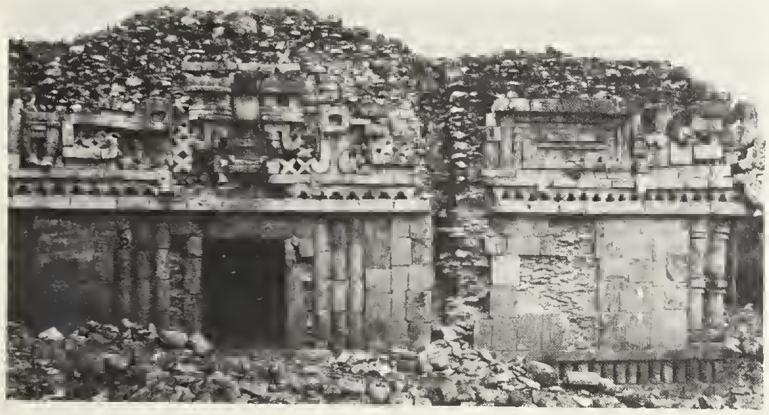


Figure 18. Labna, Structure 1, East Wing. Entrance to Room 19, showing elaborate decoration on west facade.

in course of construction, as wall would normally taper to width of jamb.

Plaster on south jamb of doorway to Room 20 shows raised border (fig. 20). Raised border also shows at top and bottom of jamb in doorway to Room 16.

Upper story has both simple and multiple columnar doorways (fig. 13a). All lintels of stone. Doorway to Room 58 is exceptional in having two sets of jambs (fig. 8) and two lintels owing to two periods of construction (see Secondary Construction and Building Sequence, below).

Multiple doorways are common variety of two columns with square or rectangular capitals and corbels on jambs (figs. 21, 22). Each column shaft of two stones and foot of column rests directly on floor of room. Column drums vary considerably in height, with either the two being roughly equal or the lower being much the longer. Each drum carries entasis of its own, curve being especially pronounced at top and bottom of drum. Low or short drums apt to be rather straight sided in profile except for the curve at ends.

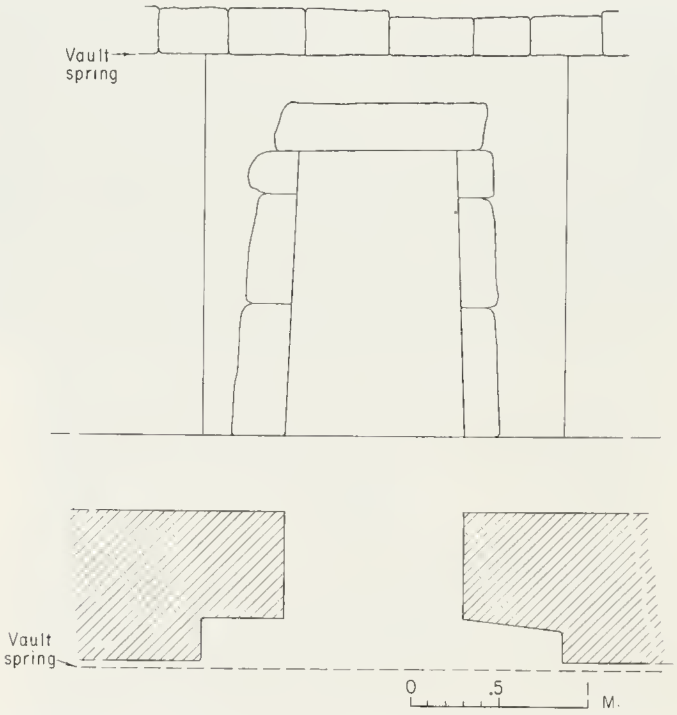


Figure 19. Labna, Structure 1, East Wing. Plan and elevation of doorway to Room 17.

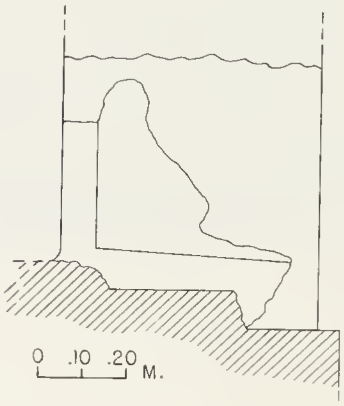


Figure 20. Labna, Structure 1, East Wing. South jamb of doorway to Room 20 with remains of plaster panel with raised border.

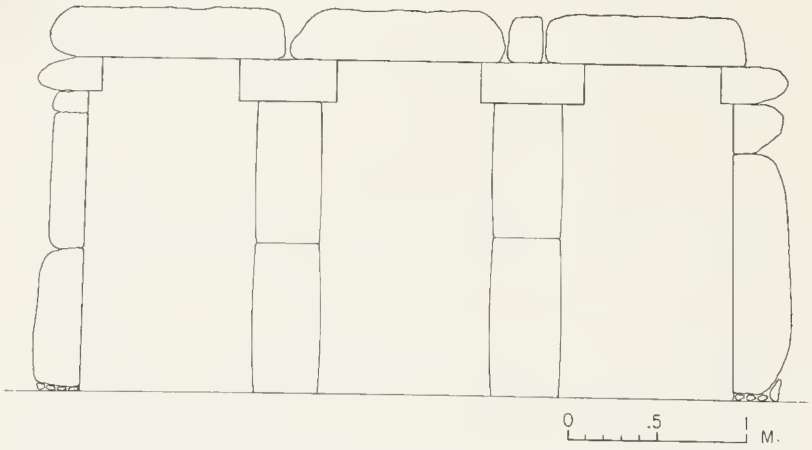


Figure 21. Labna, Structure 1, East Wing. Elevation of entrance to Room 59.

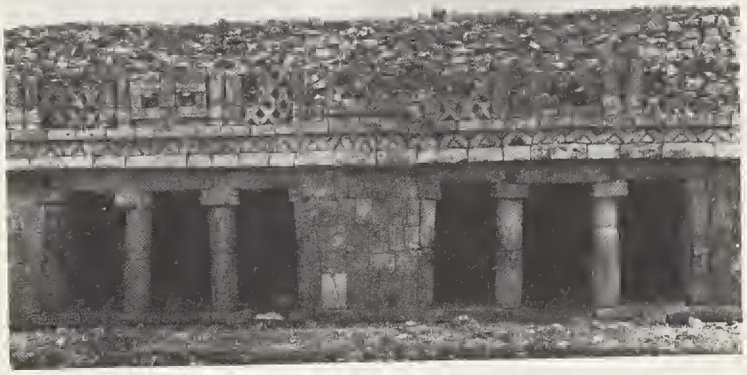


Figure 22. Labna, Structure 1, East Wing. Entrances to Rooms 59 and 61, showing medial molding and facade decoration.

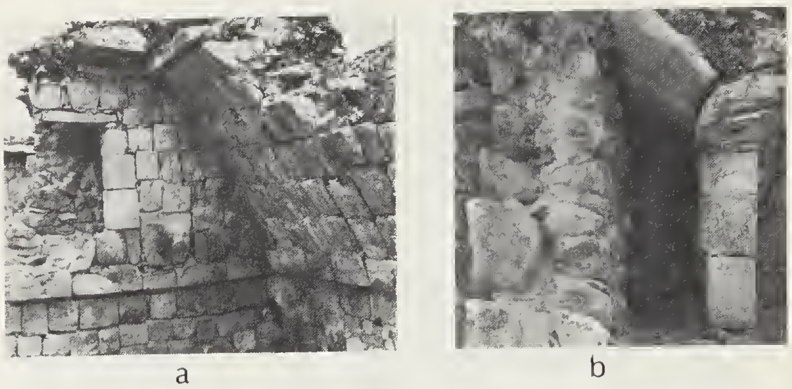


Figure 24. Labna, Structure 1, East Wing. Partly fallen niche at west end of vault in Room 12: a, view from east; b, view from south.

Wall Depressions and Projections. Small cupboard-like opening at west end of Room 12 (figs. 23, 24). Located in end of vault above spring, a common location for such depressions.

Common varieties of cordholders, viz., tongue-at-corner-of-stone, tongue-at-side-of-stone, hole-near-edge-of-stone (see Sabacche, Strs. 1 and 5, figs. 136e, 146a,c). Second variety most common, last variety rare. Most occur inside doorways at either side of jamb stones, from one to four on a side. Common arrangement is at top of bottom course of wall, at half height of doorway, and at level of underside of lintel. Also occur occasionally in end wall or rear wall of room, always below spring of vault and singly.

Hemispheroid depressions fairly common in door jambs. Average .04–.05 m in diameter, .01–.02 m in depth. Usually occur .20–.25 m above floor and below lintel. Tendency to be located toward inner edge of jamb, with one more depression below than above (see Sabacche, Str. 5, fig. 146b). Four below and three above maximum noted. Instances of single one below or single one above.

These depressions in jambs probably served as sockets for rods to hold curtains or to accommodate the cross-poles of a wicker-work door. E. H. Thompson (1889a, p. 23) suggests the latter alternative.

E. H. Thompson (1889a, pp. 18–20) notes and illustrates cord fasteners in form of a bone set into wall between stones, shaft of bone projecting at right angle from surface of wall. Found just below spring of vault above entrances. He notes these at Labna, Chuncatzim, Huntichmuli, Xkichmook, and Sabacche, but not at Uxmal. No bone cordholders observed by me.

Benches. Found in Rooms 16, 18, 20, and 61 (see figs. 3, 10). Large bench in Room 20 is exceptional; noteworthy that front is in line with step-up to Room 21.

No decoration noted in connection with any bench.

Vaults and Beams. Lower story vaults are arched or barrel shaped (i.e., concavely curved soffit slopes; see fig.

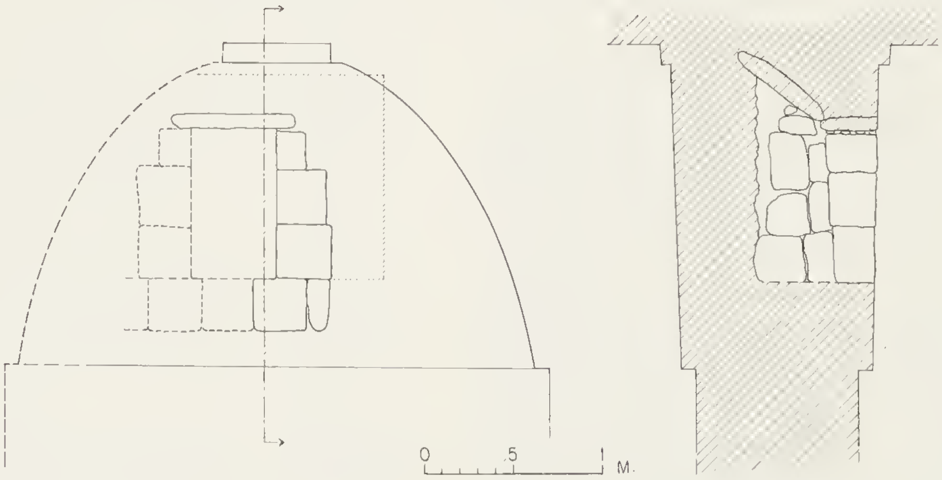


Figure 23. Labna, Structure 1, East Wing. Elevation and section of niche at west end of vault in Room 12.

24a) and ends of vaults carry slight pitch but are nearly vertical (see fig. 10 and other sectional drawings). Offset always present at level of spring at end of vault and beneath capstones. All of these features are common in region. Capstone span apt to be relatively wide.

Spring course is at level immediately above lowest course of medial molding and is of well-cut stones, deeply tailed in (fig. 25). Remaining vault stones vary in shape from specialized, boot shaped to relatively little specialization (fig. 26), but never of deeply tenoned slab variety. Stone is well faced, standing between inner and outer wall stone in this respect.

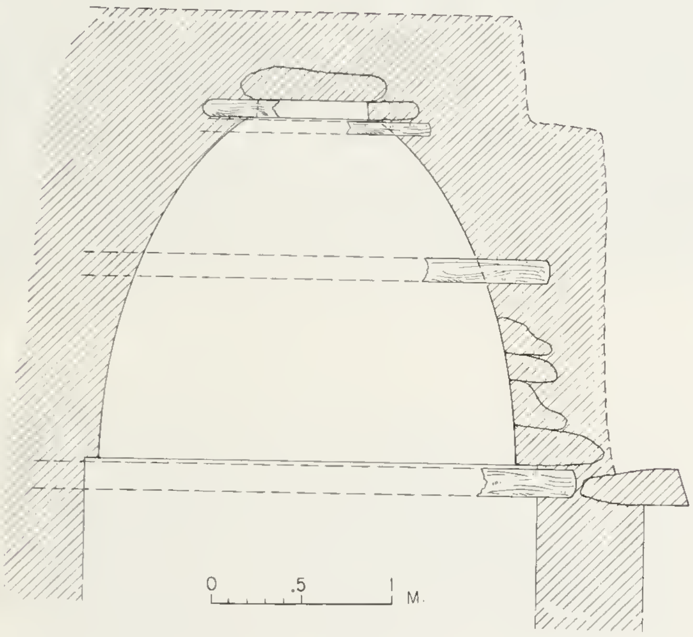


Figure 25. Labna, Structure 1, East Wing. Schematic section of lower story vault.

Roughly finished backing to vault (see Sabacche, Str. 5, figs. 144b, 147a), not well defined but quite surely present.

Cleavage between vault of Room 18 and that of Room 19 (fig. 18) indicates former was built first (see Secondary Construction and Building Sequence, below).

Beam holes at three levels (fig. 25): (1) immediately beneath spring of vault, one beam at each end of room, (2) at one-half to two-thirds height of vault, usually three beams, (3) in offset beneath capstones or immediately below offset, often four beams. Lowest beams largest, top beams smallest. Beams may have helped to support scaffolding and bracing forms during construction of vault, but seem to have been factor in stability of vault after construction. Also may have served utilitarian purposes other than structural.

Occasional traces of red circle painted around beam hole (see E. H. Thompson 1889a, p. 17).

Upper story vaults narrower and more nearly straight sided than those of lower story (figs. 12, 27). Capstone span narrower than in lower vaults. Suggestion of outline of earlier vault in east end wall of Room 58 (fig. 11; and see Secondary Construction and Building Sequence, below).

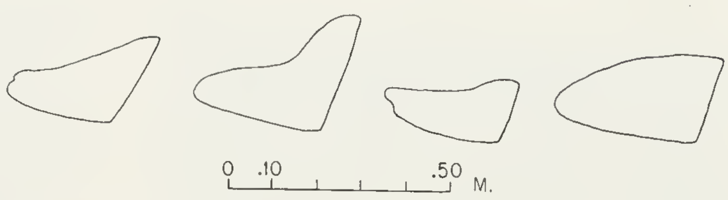


Figure 26. Labna, Structure 1, East Wing. Profiles of vault stones.

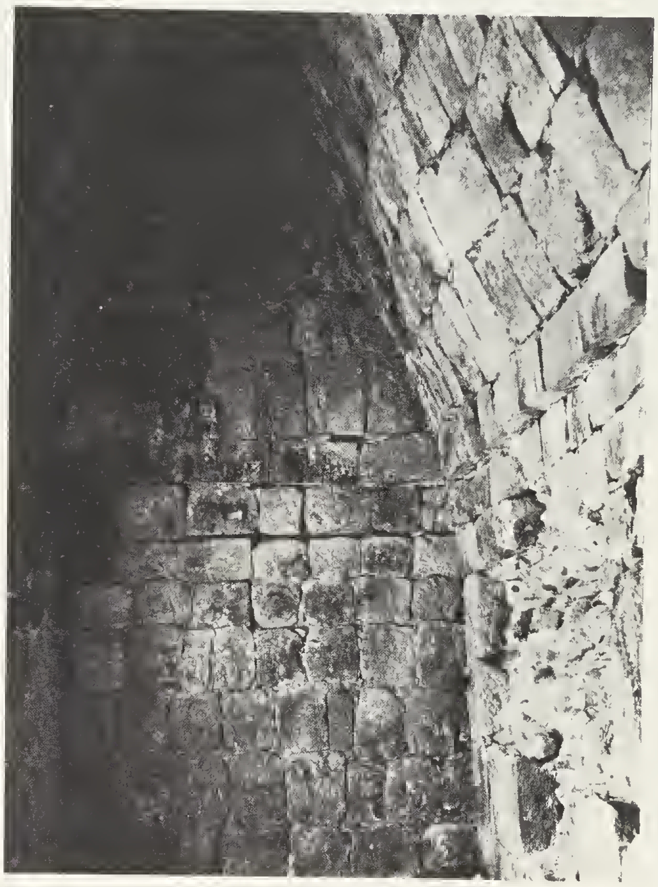


Figure 27. Labna, Structure 1, East Wing. West end of Room 59.

Beam holes in upper story at two levels: (1) immediately below spring of vault in front rooms and in spring course in rear rooms, thus being on same level owing to change in height of spring in rear rooms (fig. 12), (2) in offset beneath capstones. Lower beams in both front and rear rooms rest on plaster stratum marking completion of lower walls (see Sabacche, Str. 5, fig. 147a).

Moldings. Lower story has typical three-member medial molding with step design as middle member (figs. 13, 28a, 30). Top member carries rosette decoration both as separate element (shield ?) and carved on molding stones (see Spinden 1913, figs. 179, 180a).

Cornice molding of lower story same as medial molding, including rosettes (not shown in elevation), but with usual overhanging coping course (figs. 9, 13, 17). None of coping in place, but probably made of two courses with total height of .65–.67 m.

Upper story has three-member medial molding with zigzag and triangle design as middle member (figs. 13, 22, 28b, 31; and see Spinden 1913, fig. 177). None of cornice molding remaining on upper story. Presume it to have been same as medial, but with usual overhanging coping.

Medial molding on buried walls of Room 58 is simple string course with very slight apron batter (fig. 11).

Decoration. (see Hissink 1934, pp. 54–57, 97, 102, 106). Lower wall zone of lower story has split columns at each side of doorways and banded columns at the standing southwest corner (figs. 13, 17, 18). Upper wall zone of southern facade carries split columns and squares, giving step design over doorways, and frets and rosettes. Elaborate naturalistic mask at southwest corner (figs. 29a, 30a; and see Proskouriakoff 1946, pl. 15). Upper zone of west facade carries naturalistic mask (figs. 18, 29b; and see Pijoan 1946, fig. 752) with hieroglyphs on snout (see Date, above) over doorway, and lattice design, lower half of human figure, split columns and squares, frets, and chain of triangles (figs. 13b, 18). E. H. Thompson (1889a, pp. 37–38) reports fallen and badly weathered upper part of human figure and also a similar human figure south of mask.

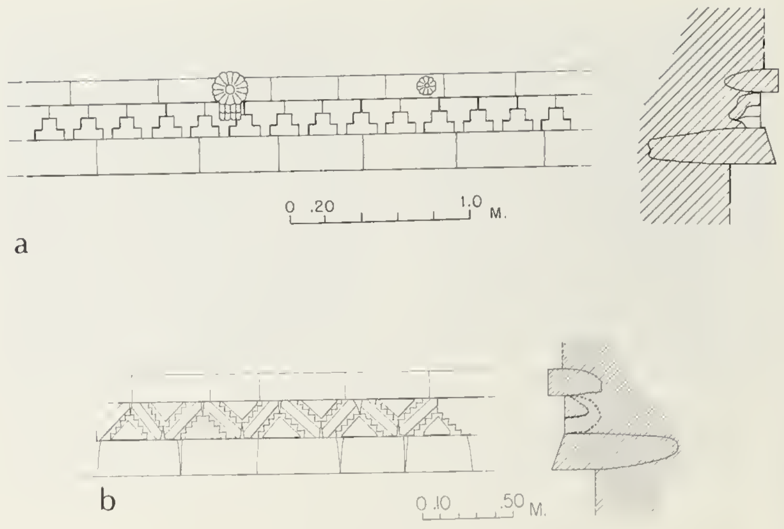


Figure 28. Labna, Structure 1, East Wing. Elevations and sections of medial moldings: a, lower story; b, upper story.

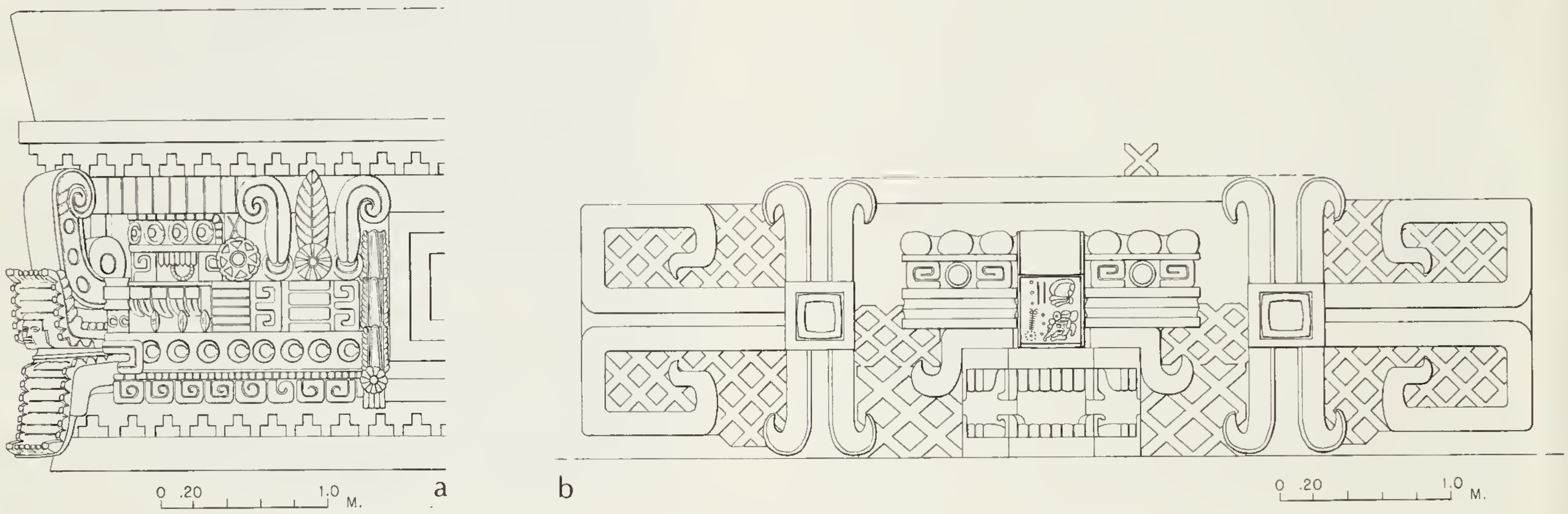


Figure 29. Labna, Structure 1, East Wing. Facade decoration on lower story; a, mask at southwest corner; b, mask over doorway to Room 19.

E. H. Thompson (1889a, pp. 17, 21–23, 26–28) found red, blue, and green mural painting in Room 14, imprints of red hands in Rooms 14 and 15, and illustrates black and white drawings in Room 18. None of these observed by me. Red circles painted around beam holes in Room 14.

No decoration remaining in connection with lower wall zone of upper story, but may have been corner facade columns. Upper zone of facade carries abbreviated, conventionalized masks (fig. 31) over doorways, banded split columns, lattice design (see Spinden 1913, figs. 180b, 181) and frets (figs. 13a, 22). Probably were corner masks, but not certain.

CENTER WING (Rooms 22–28, 41–57, 64–67)

Plan. See figure 3.

Sections. See figures 5b, 32, 33.

Elevation. See figure 34a; and Proskouriakoff 1946 (pl. 15). Fallen facade of Room 23 is restored to conform to standing facades of Rooms 22 and 25.

Base Moldings. Lower story has four-member molding (fig. 32), second member carrying colonnettes in groups of three or continuous (fig. 34a), third member an apron course (fig. 35).

Same style of base molding with slightly different proportions and continuous colonnettes in second member on rear wall of Room 23, beneath entrance to Room 24 (figs. 32, 47).

Two-member base molding with colonnettes in lower member across west end of Room 26, beneath entrance to Room 27 (figs. 36, 43b).

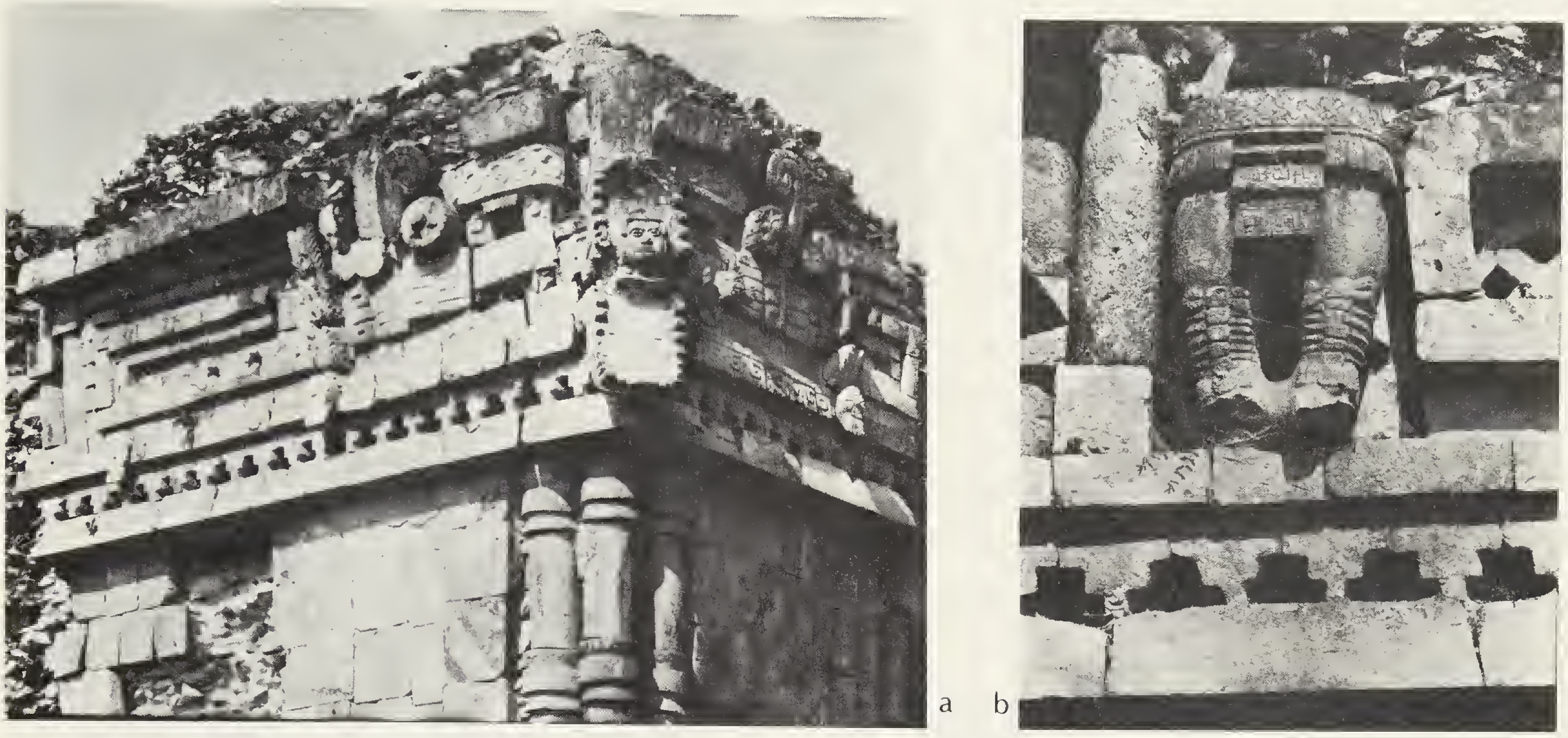


Figure 30. Labna, Structure 1, East Wing. Facade decoration on lower story: a, mask at southwest corner; b, lower part of human figure.

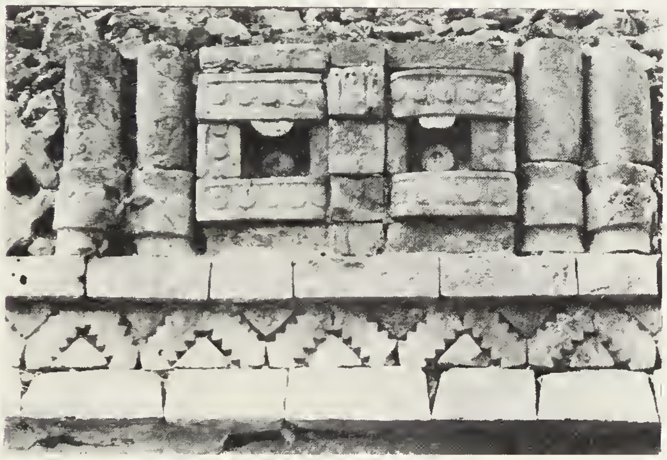


Figure 31. Labna, Structure 1, East Wing. Mask over entrance to Room 59.

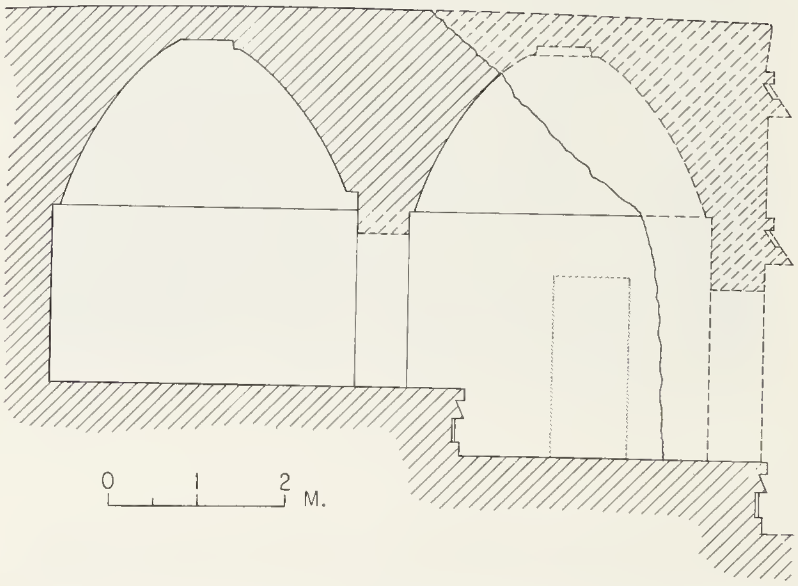


Figure 32. Labna, Structure 1, Center Wing. Section through Rooms 23, 24, showing blocked doorway at east end of Room 23.

Base of upper story deeply buried and character of molding unknown.

Floors. Number of fragments remaining. Cream yellow in color.

Apparently no rise in floor level to inner chamber (Room 51) of upper story (fig. 33), but this not certain.

Walls. In early eastern part of wing, Rooms 22–25 (see Secondary Construction and Building Sequence, below), interior wall stone is rather better dressed than interior stone in East Wing. Wall stone of Rooms 26–28 comparable to that of East Wing (fig. 43). In all other details walls are similar to those of East Wing (figs. 37, 45).

Walls of upper story, Rooms 41–46, faced with less well dressed stone, both inside and out, but otherwise normal. Exterior rear wall of this part of building carries dressed stone only on lower zone (fig. 38), upper zone of rough masonry (see Secondary Construction and Building Sequence, below).

Walls of Rooms 50 and 51, and possibly of surrounding rooms, somewhat thinner than seen elsewhere in structure. Jambs of entrance to Room 50, .54 m in width, jambs of door to Room 51 .50 m, end walls apparently .50 m thick. Stone runs smaller than in lower story, averaging around .20 × .20 m. Inner and outer wall surfaces made

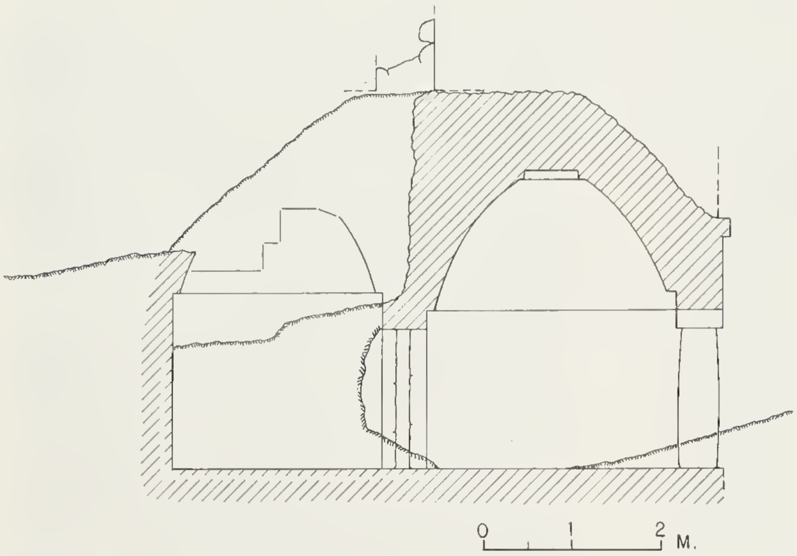


Figure 33. Labna, Structure 1, Center Wing. Section through Rooms 50–52.

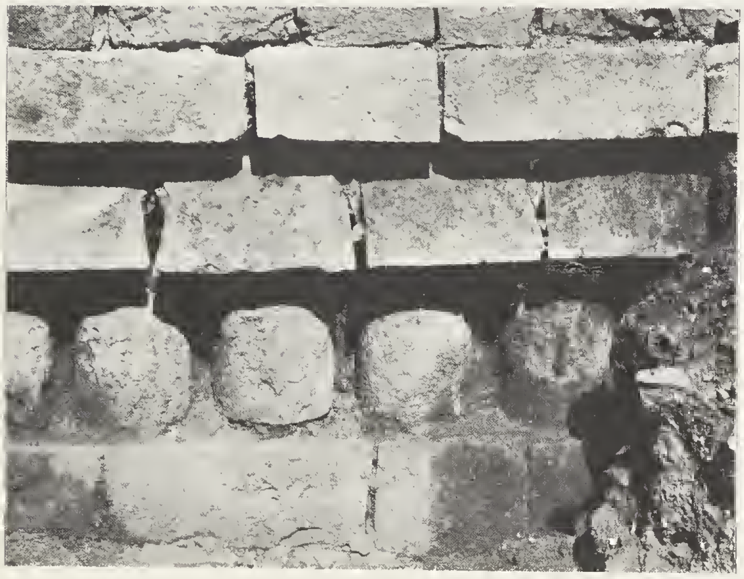


Figure 35. Labna, Structure 1, Center Wing. Base molding at west end (Room 28).

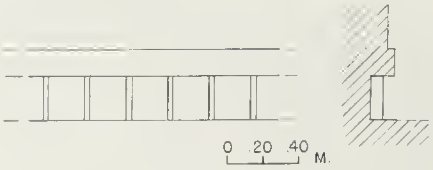


Figure 36. Labna, Structure 1, Center Wing. Elevation and section of base molding at west end of Room 26.

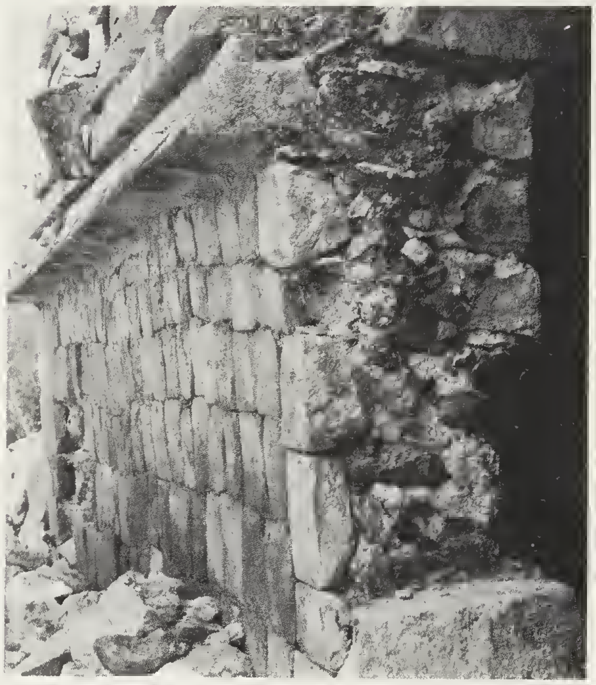


Figure 37. Labna, Structure 1, Center Wing. Section of wall at entrance to Room 26, looking west.

of moderately well-dressed stone (fig. 39) comparable to inner facing stone of Rooms 22–25.

Doorways. Lower story doorways of simple, rectangular style with stone lintels and large, well-cut jamb stones, but no jamb formed of a single stone (fig. 45). Width of doorways (at bottom) runs from .95 to 1.50 m, the widest being entrance to Room 26. Tendency for doorways to be .05–.10 m narrower at top than at bottom (see fig. 34a). Blocked doorway in east wall of Room 23 (fig. 32; and see Secondary Construction and Building Sequence, below).

In upper story, outer doorways of Rooms 41–46 fallen, but those of Rooms 42 and 44 seem to have been of multiple variety, each with two columns and rectangular capitals like entrances to Rooms 59 and 61 (figs. 13a, 21). Doorways to Rooms 43 and 45 simple rectangular type.

Entrance to Room 50 is of multiple variety with two columns (the shaft of one a single stone), rectangular capitals, and corbels on jambs (fig. 39; and see Mariscal 1928, figs. 30, 31). Room 64 seems to have had entrance with single decorated column (see Decoration, below), but this not certain.

Jamb construction of doorways to Rooms 50 and 51 different from normal. Jambs made of two vertical courses of cornerstones faced on two sides, with small faced stones between (fig. 40), or with rubble and mortar fill (Room 51) between vertical corner courses (fig. 33).

Two side doorways in multiple entrance to Room 50 blocked by secondary walls, leaving only center opening between columns (see Secondary Construction and Building Sequence, below).

Wall Depressions. Cordholders like those in East Wing, i.e., tongue-at-side-of-stone, tongue-at-corner, hole-near-edge-of-stone (see Sabacche, Strs. 1 and 5, figs. 136e, 146a, c). Also rod sockets in jambs (see Sabacche, Str. 5, fig. 146b). All these depressions found in same positions as in East Wing (see above).

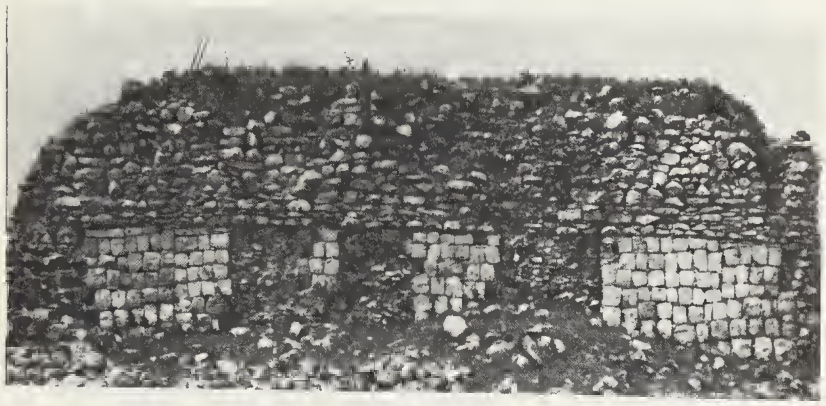


Figure 38. Labna, Structure 1, Center Wing. Rear wall of upper story (Rooms 43, 45), showing rough masonry of upper wall zone.

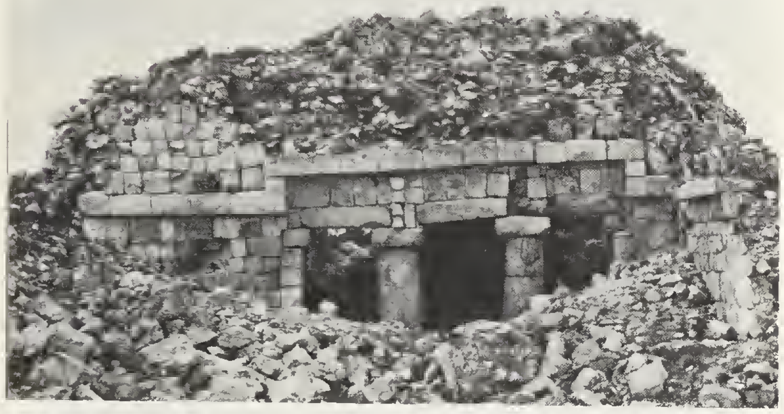


Figure 39. Labna, Structure 1, Center Wing. Entrance to Room 50.

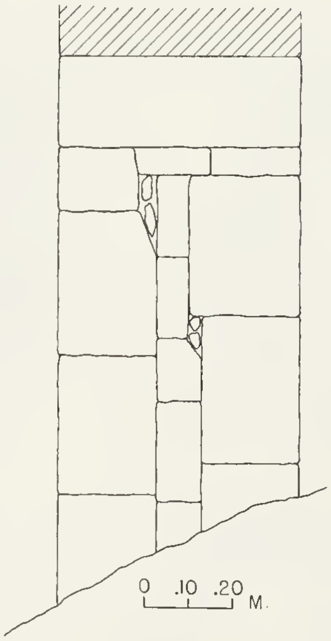


Figure 40. Labna, Structure 1, Center Wing. Elevation of east jamb of entrance to Room 50.

Cupboardlike openings in Rooms 26 and 27 somewhat similar to opening in Room 12, East Wing (see above), but in different positions in rooms and more elaborate. Small chamber in north wall of Room 26, just below spring of vault, at east end of room (see fig. 3). Chamber cruciform in plan (fig. 41a). Well-cut jambs and lintel at entrance; walls of faced stone; roofed with capstones. Small two-room chamber in north wall of Room 27, just below spring of vault, at northwest corner of room (see fig. 3). Construction similar to small chamber in Room 26 but effort to imitate normal size rooms in suggestion of vault, in step up to inner room, and in careful construction of inner doorway (figs. 41b, 42).

Small chambers in walls of Rooms 26 and 27 surrounded by loose fill behind lower-story rooms of Center Wing (see Secondary Construction and Building Sequence, below).

Upper-story Rooms 41–46 have same standard varieties of cordholders seen in lower story.

Benches. Top of bench at rear of Room 23 is floor level of Room 24 (fig. 32). Front of bench carries molding same as exterior base molding of west part of Center Wing and performs function of base molding on interior facade to Room 24 (fig. 47).

Rise in floor level to Room 27, with decorative molding (fig. 43b), is suggestive of bench.

Vaults and Beams. Lower-story vaults essentially the same style and construction as those of East Wing (fig. 43). Extraordinarily wide capstone space (i.e., between small offsets), running up to .75 m at places.

North side of vault in Room 24 does not carry small offset at top and level of spring is lower at north than at south (see fig. 32).

In upper story, vaults of Rooms 43 and 45 much narrower in proportion to height, and vault stone not so well faced. Coat of fine, very hard, cream-colored plaster on north face of vault of Room 43.

Vault of Room 50 remarkable for its proportions, being very low in relation to width (fig. 33). Abnormal in level of spring being one course higher at south and west sides than at north and east. Level of spring in rear room (Room 51) same as at south and west of Room 50. Normal relation of spring to medial molding, disregarding rise of molding over doorway (see Mariscal 1928, fig. 30), does not hold true, molding being at level of spring course on south side of Room 50.

Moldings. Lower story carries typical three-member medial molding with colonnettes in second member terminated by square apron element at corners of building (figs. 34a, 44a, 45). Cornice molding the same with addition of usual coping course (fig. 44b).

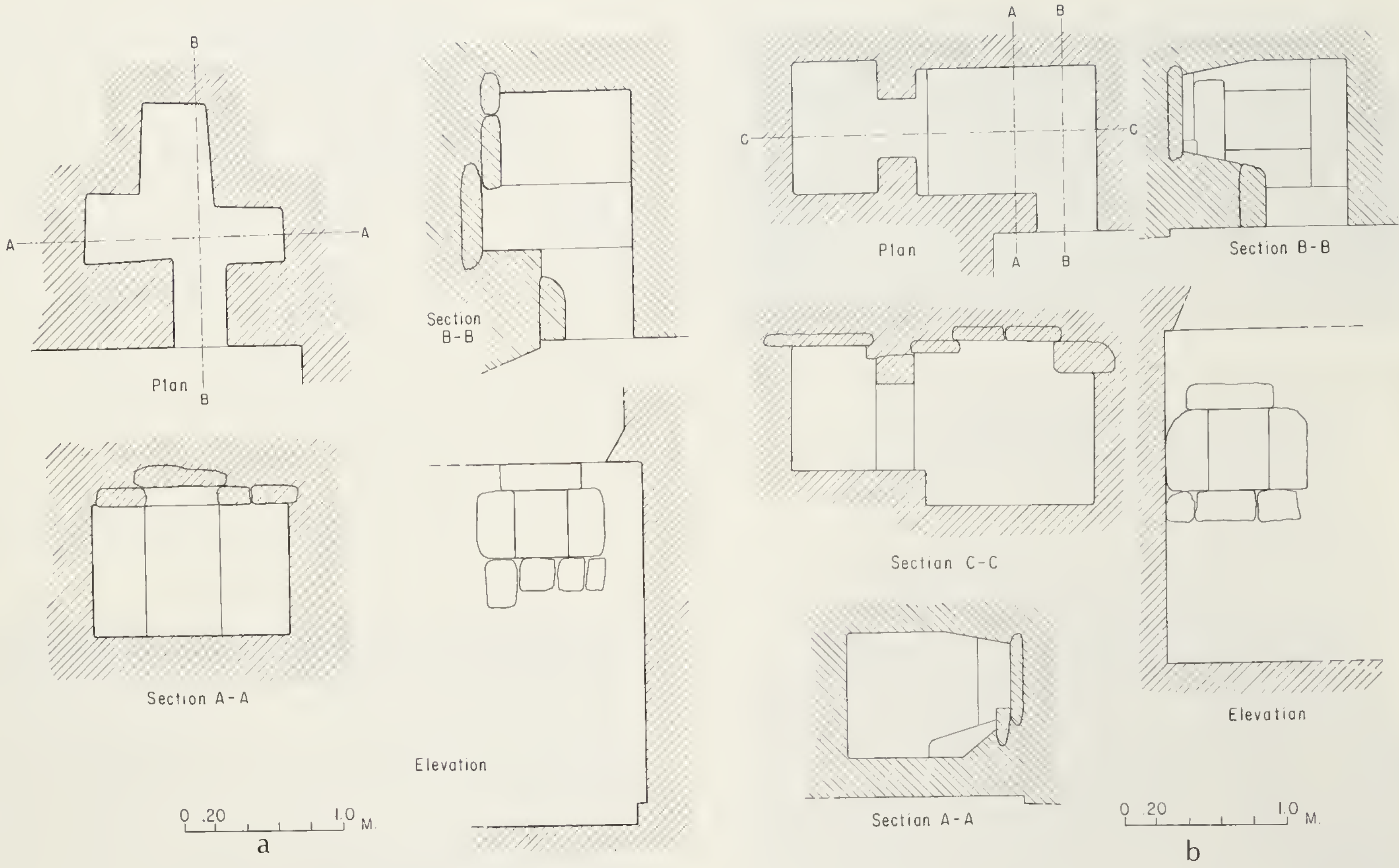


Figure 41. Labna, Structure 1, Center Wing. Plans, sections, and elevations of wall niches: a, in north wall of Room 26 (see fig. 3); b, at northwest corner of Room 27.

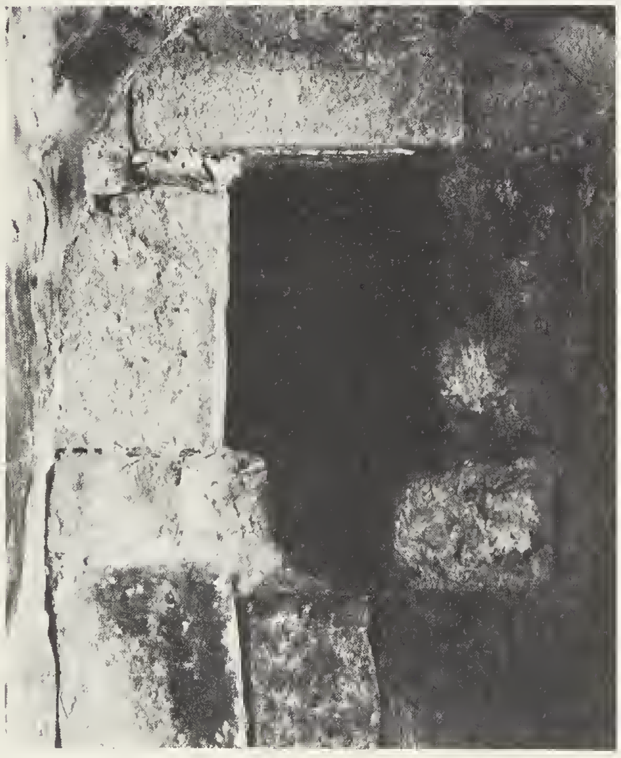


Figure 42. Labna, Structure 1, Center Wing. Opening to niche in Room 27 (see fig. 41b).

Simple rectangular medial molding that rises over entrance to Room 50 of upper story (fig. 39; and see Mariscal 1928, fig. 30). Wall above molding set back slightly in relation to lower wall zone (fig. 33). No cornice molding remaining on upper story.

Roof Structure. Trace of roof comb on upper story directly over wall between Rooms 50 and 51 (fig. 33). Three courses of stone standing at one place in front and single course at rear. Roof comb probably of perforated variety, but not certain. Typical faced wall-stone construction.

Decoration (see Hissink 1934, pp. 54–57, 102). Lower wall zone of Rooms 22 and 25 of lower story carries banded split columns at corners and at each side of doorways (figs. 34a, 45). Also vertical panels of braid or basketweave design. Facade of Room 23, completely fallen, has been restored in same manner in drawing. Lower wall zone of Rooms 26–28 in later, western part of wing is plain (fig. 34a). Upper wall zone carries simple, stylized abbreviated masks at corners and over doorways (fig. 46). Banded split columns at each side of masks, and frets between. Room 23 facade restored in same manner.

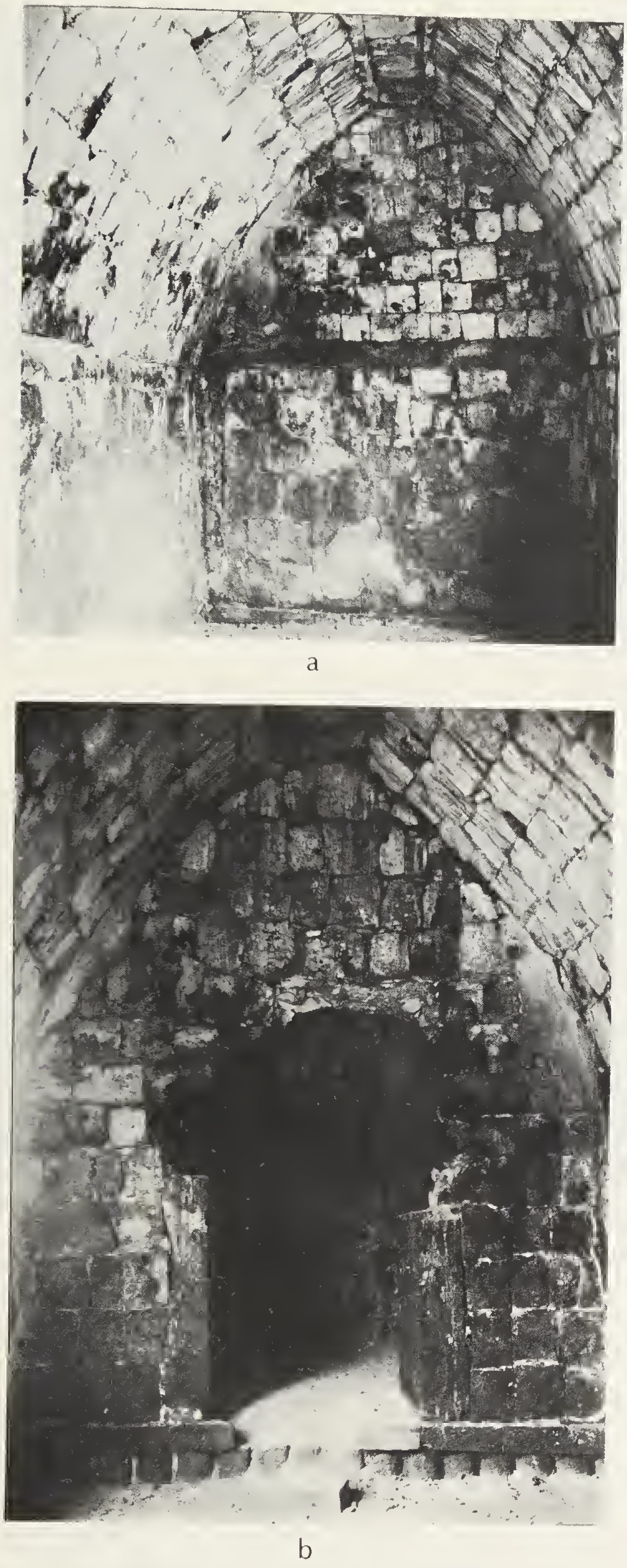


Figure 43. Labna, Structure 1, Center Wing, Room 26: a, looking east, showing old base molding and medial molding across end of room; b, looking west, showing base molding and doorway to Room 27.

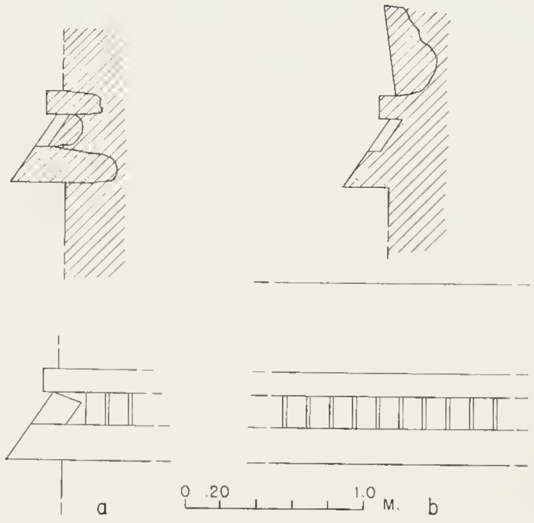


Figure 44. Labna, Structure 1, Center Wing. Sections and elevations of moldings on lower story: a, medial molding; b, cornice molding.

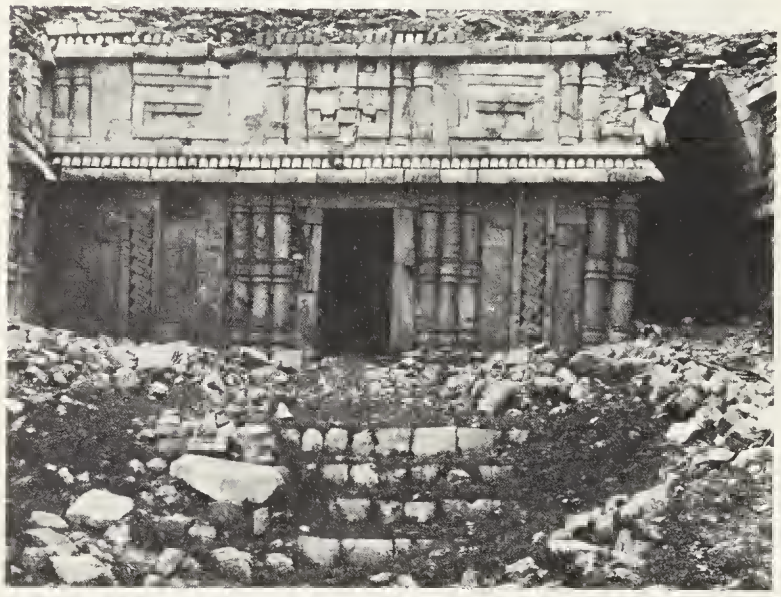


Figure 45. Labna, Structure 1, Center Wing. Facade of Room 22, showing vaulted passage between East and Center Wings at right, and stairway before Rooms 22–25 in foreground (cf. fig. 34a).

Rear wall of Room 23, which forms facade of interior Room 24, has rather elaborate decoration consisting of a vertical row of colonnettes laid on their sides at each side of doorway, stepped squares, frets, and horizontal panels of diamonds (fig. 47). Also base molding like that on exterior of western part of wing (fig. 32). Excellent example of back wall of outer room treated as facade of inner room.

Only facade decoration remaining on upper story is pendent tassellike design over columns in entrance to Room 50 (fig. 39; and see Mariscal 1928, fig. 30).

Section of fluted and banded column (fig. 48) lying east of Rooms 64, 65. E. H. Thompson (1889a, p. 64) reports another fluted-column section here. Seems probable

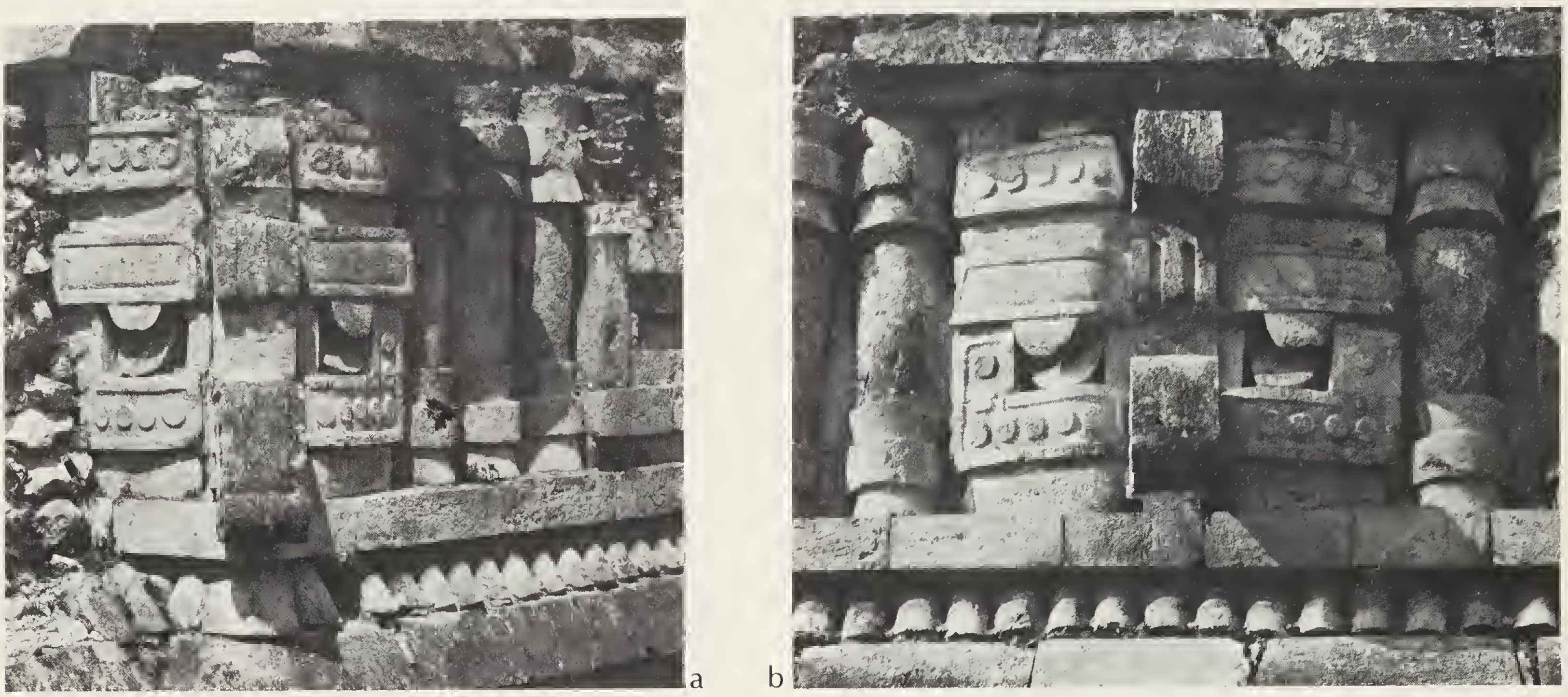


Figure 46. Labna, Structure 1, Center Wing. Masks on upper facade: a, at corner; b, over doorway.

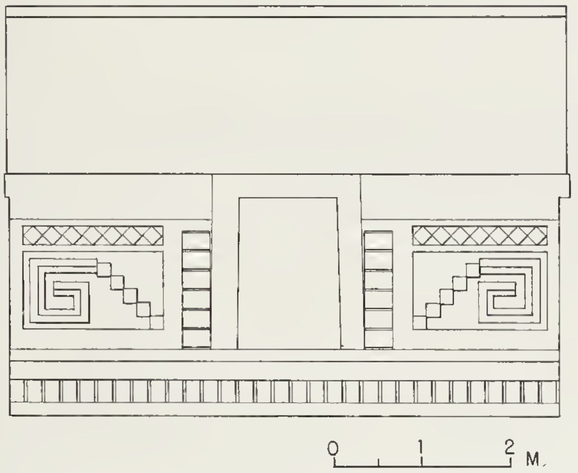


Figure 47. Labna, Structure 1, Center Wing. Elevation of rear wall of Room 23 which forms decorated facade of Room 24.

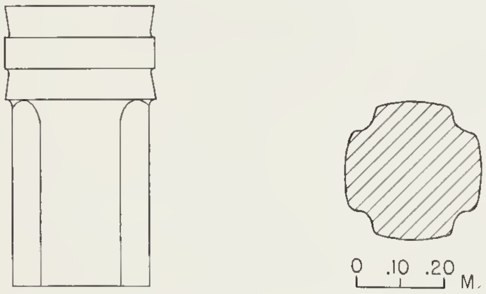


Figure 48. Labna, Structure 1, Center Wing. Elevation and section of shaft of fluted column found east of Rooms 64, 65.

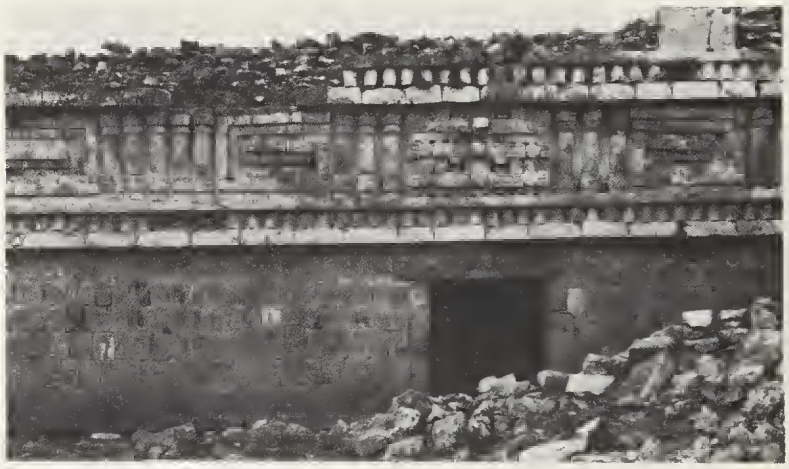


Figure 49. Labna, Structure 1, West Wing. Doorway to Room 29, showing medial and cornice moldings and facade decoration.

that the two or possibly three such sections formed a column in doorway of Room 64.

WEST WING (Rooms 29–31)

Plan. See figure 3.

Sections. See figure 5c.

Elevation. See figure 34b. Fallen west end of wing restored in keeping with standing portion of facade.

Base Molding. Normal three-member molding with colonnettes in middle member (figs. 5c, 34b). Square block in middle member at southwest corner is restored as probably existed.

Floor. Fragments of floor indicate same cream-to-tan color seen elsewhere.

Walls. Thickness at jambs .56–.58 m. Transverse wall 1.02 m thick. Outer and inner facing stone (figs. 49, 50c)

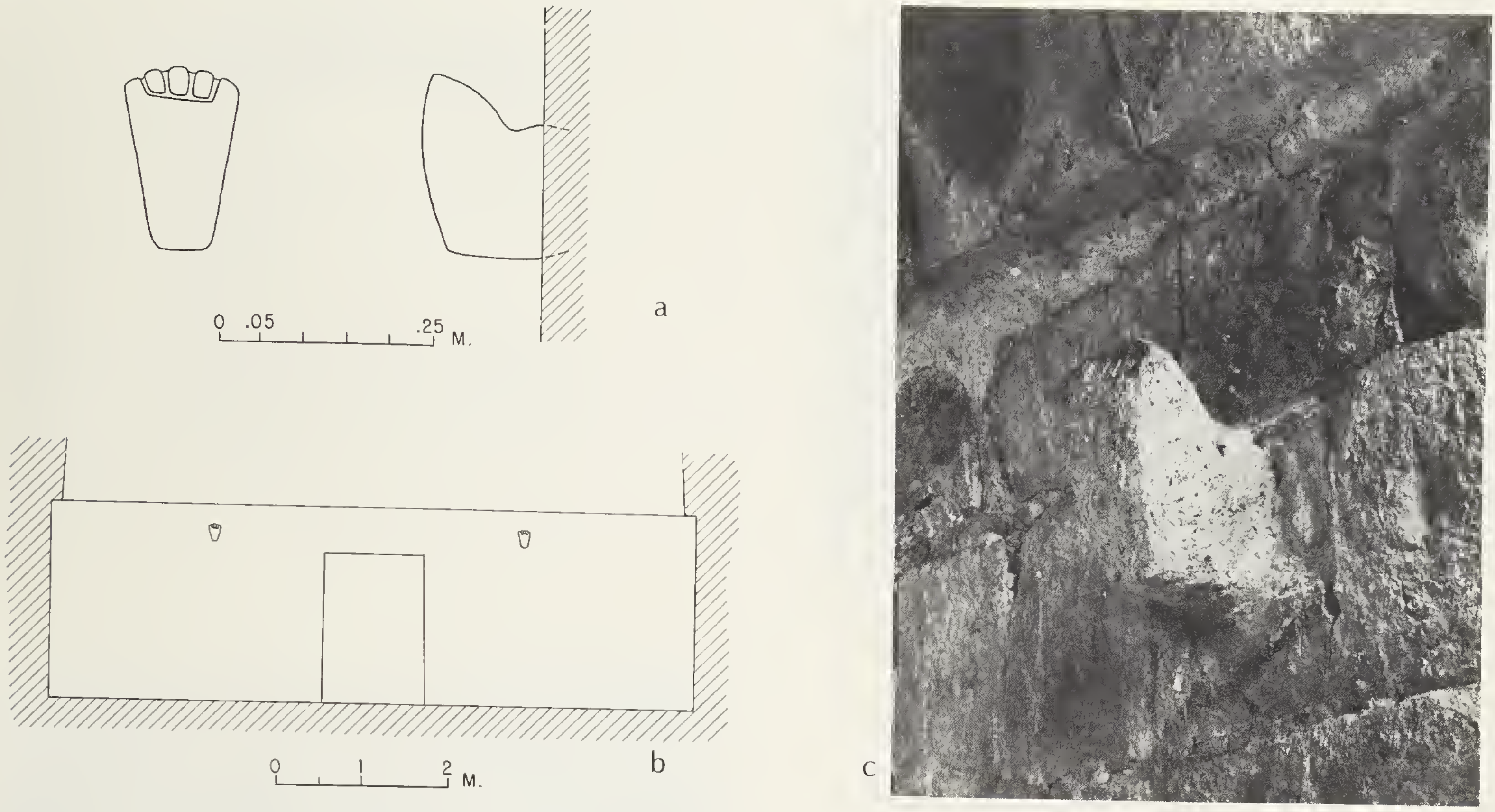


Figure 50. Labna, Structure 1, West Wing. Cordholders carved in likeness of human foot: a, detail drawing; b, elevation of south inner wall of Room 30, showing location of cordholders; c, close view of western cordholder.

comparable to that of east part of Center Wing (Rooms 22–25; see above).

Area of less well-dressed stone in rear wall of Room 30. This seen both inside and outside the room. Area is 1.37 m wide at floor, 1.20 m wide at top, extends upward to within one course of spring of vault, and is roughly centrally located in room. Appears that doorway was planned here, but opening filled in prior to erection of vault (see Secondary Construction and Building Sequence, below).

Doorways. Simple doorways with stone lintels and large well-cut jamb stones (see East Wing, Doorways, above). Tendency for doorways to narrow at top. Entrance to Room 29 is 1.58 m wide at bottom, 1.54 m at top, and is widest in Structure 1 (fig. 49).

Wall Depressions and Projections. Fewer than elsewhere in structure, but tongue-at-side-of-stone variety of cordholder (see East Wing, Wall Depressions, above) beside doorways and in eastern wall of Room 29. Also rod-socket depressions in jambs.

Stone peg carved in semblance of human foot tenoned into inner face of front wall at each side of doorway on level of lintel in Room 30 (fig. 50). Apparently cordholders, presumably to suspend curtain for doorway.

Vaults and Beams. Differ from lower-story vaults in East and Center Wings only in minor details. Exceptionally heavy stone .23–.40 m thick in spring course. Deep offset .15–.20 m beneath capstones (fig. 5c), and narrow capstone span at center that widens at each end of vault, running from about .15 to .35 m.

No beam holes in offset beneath capstone; otherwise beam arrangement same as in other lower-story vaults.

Moldings. Typical three-member medial molding with colonnettes in middle member (figs. 5c, 34b, 51b). Colonnettes slightly overhang lowest member. End of building fallen but presumably had a square apron element in middle member at corner, as in Center Wing.

Cornice molding same as medial with addition of coping course (fig. 49).

Decoration (see Hissink 1934, pp. 56–57, 102). Lower wall plain (fig. 49), but possibility of facade column at fallen southwest corner. Over doorways and in upper wall zone are simple stylized masks, essentially like those of Center Wing, but less abbreviated, with circle and fret elements at sides (fig. 51). Presumably a corner mask at southwest corner, but this is not certain. Banded split columns at each side of masks, and fret between columns (fig. 34b). Upper wall zone at rear of wing carries plain split columns (fig. 52).

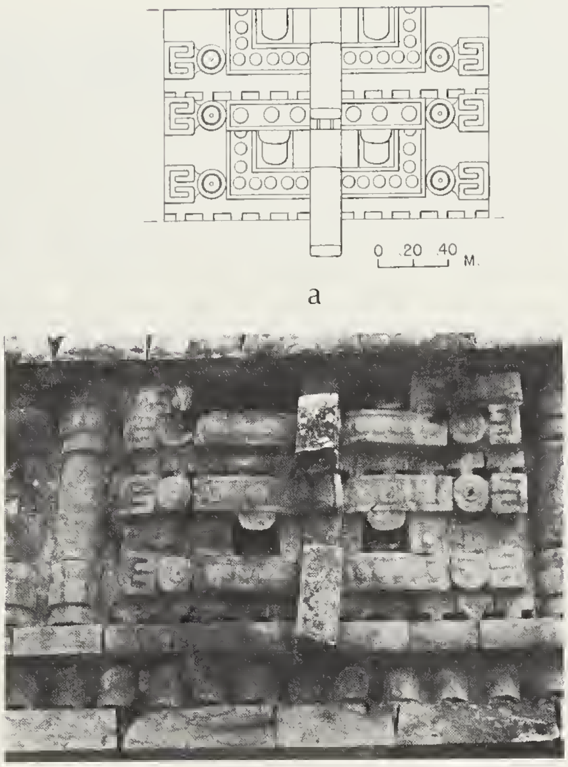
SOUTH WING (Rooms 32–36)

Plan. See figure 3.

Section. See figure 53.

Base Molding. Plain single course of dressed stone (fig. 53).

Walls. Run .55–.64 m thick at jambs. Transverse walls in same range of thickness. Rear wall .93 m.



a

b

Figure 51. Labna, Structure 1, West Wing. Masks on south facade: a, elevation drawing; b, view of mask over doorway to Room 30.

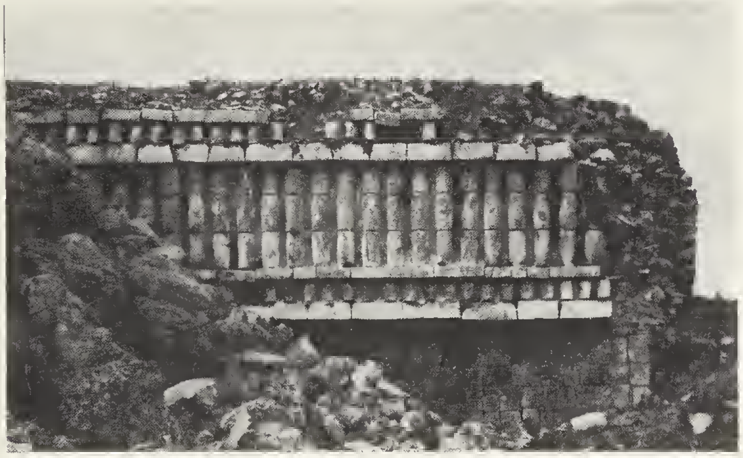


Figure 52. Labna, Structure 1, West Wing. Facade decoration on north side (rear) of building.

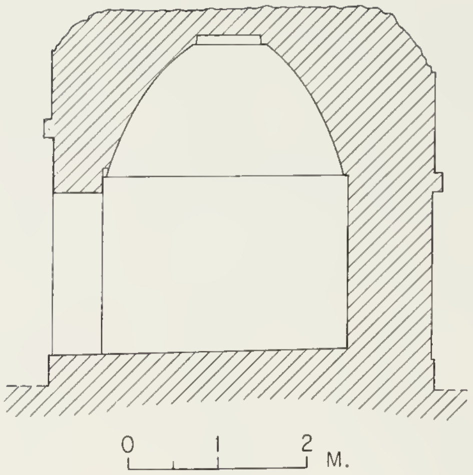


Figure 53. Labna, Structure 1, South Wing. Section through Room 34.

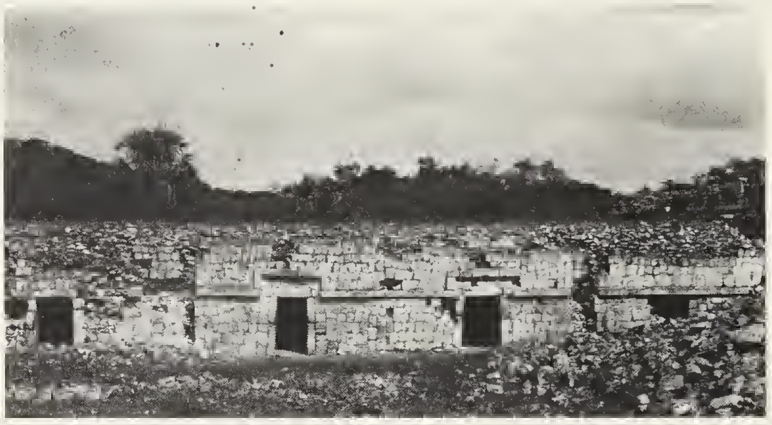


Figure 54. Labna, Structure 1, South Wing. East facade, showing doorways to Rooms 32–35.

Outer and inner facing stone rather poorly dressed (figs. 54, 57) and comparable to that of Center Wing, upper story, Rooms 41–46 (see above).

Doorways. Simple rectangular doorways with stone lintels; all but doorway to Room 32 with usual large jamb stones (figs. 54, 55). Jambs of doorway to Room 32 of cornerstone variety (see Center Wing, Doorways, Rooms 50, 51, above) but with stones touching near center of jamb instead of small stone and mortar between cornerstones; eight stones to each jamb. Doorway to Room 32 is .80 m wide. Other doorways run .98 to 1.28 m wide, usually with distinct narrowing at top.

Secondarily blocked doorway between Rooms 32 and 33. Lintel immediately below level of spring of vault; normal large jamb stones; doorway 1.28 m wide at bottom, 1.08 m at top; just like outer doorways to Rooms 33–36 (see Secondary Construction and Building Sequence, below).

Wall Depressions and Projections. Cordholders of both varieties of tongue type in usual positions on inner wall at each side of doorways. Usual rod sockets in door jambs.

E. H. Thompson (1889a, p. 55) reports conical depressions 5 inches (.13 m) in diameter and 6 inches (.15 m) deep in front wall just under medial molding at each side of doorways. Had stucco work and red lines radiating from center. Depressions not observed by me, but apparently can be seen in photograph (fig. 54; and cf. Sabacche, Str. 1, figs. 134, 135a, 136c).

Footlike wall projections, well cut but without carving to indicate toes, on inner wall at each side of doorway in

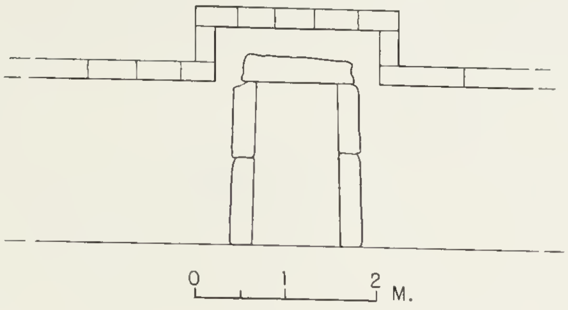


Figure 55. Labna, Structure 1, South Wing. Elevation drawing of entrance to Room 34, showing jamb stones and lintel, and medial molding rising over doorway.

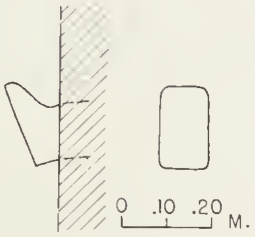


Figure 56. Labna, Structure 1, South Wing. Section and elevation of footlike wall projection in Room 34.

Room 34 (fig. 56). Heel of foot on level with bottom of lintel (see West Wing, Wall Depressions and Projections, Room 30, above).

Vaults and Beams. Vaults rather low in proportion to width, and considerable curve to soffit slopes (figs. 53, 57), but otherwise not exceptional. Spring of vault immediately above lintels, as medial molding on same level as lintels except where it rises over doorways (figs. 54, 55). Small offset beneath capstones present but probably once hidden by heavy coat of plaster. Capstone span averages about .50 m, but in Room 34 is .40 m at ends of vault and increases to .70 m at center.

Vault stone somewhat better dressed than wall stone. Capstones not dressed and apparently show natural cleavage plane.

Beam holes beneath spring of vault and in small offset course beneath capstones, but no holes in soffit slopes.

Moldings. Simple rectangular medial molding (fig. 53) on level with door lintels but rises over doorways (fig. 55), except doorway to Room 32 where molding does not rise (fig. 54). No cornice molding in place.

Roof. Fragments of final, top stratum of plaster still preserved. Fill of small flat slabs in mortar below plaster.

Decoration. Conical depressions with stucco and paint on east facade (see Wall Depressions and Projections, above).

Row of eleven carved stones of step design just below medial molding over doorway to Room 33.

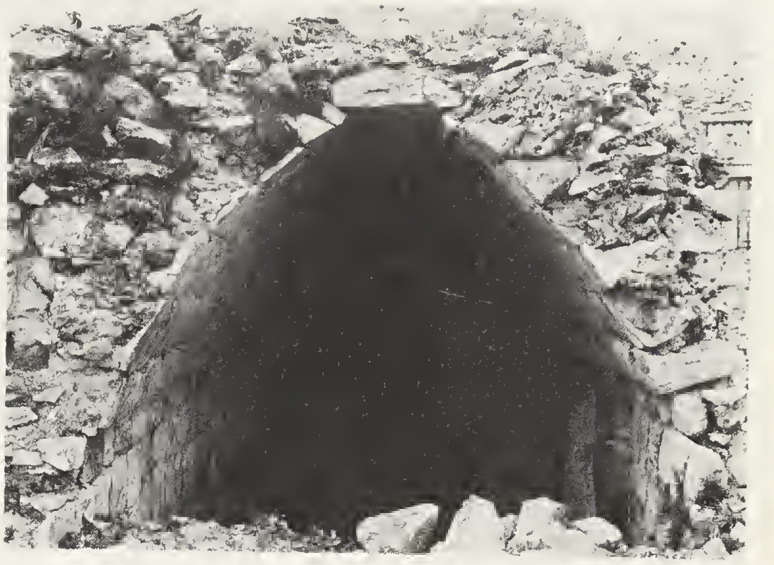


Figure 57. Labna, Structure 1, South Wing. Vault of Room 35, looking north.

SOUTHWEST WING (Rooms 37–40)

Plan. See figure 3.

Construction. Foundations of walls of four rooms on west side of court before West Wing. Rooms average about 3 m in width by 4.5 m in length.

No indication of base molding in usual sense, but rooms rest on low platform one step high. Walls stand to height of one or two courses and vary from about .40 to .70 m in thickness, averaging around .50 m. Very little fallen debris present and walls seem to have been completed with perishable materials and rooms roofed with thatch. E. H. Thompson (1889a, pp. 57–58) suggests this and adds that excavation showed structure had been used and thus was not incomplete. Thompson's excavations make it questionable how much debris was previously there.

Structure seems typical of low masonry foundations associated with dwellings and frequently located in proximity to one or more chultuns (see Sabacche, Str. 6, p. 79). No chultun now visible in court before West Wing but entrance may be clogged and hidden from view.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Although Structure 1 offers excellent opportunity to the excavator for the study of sequence of construction, this sequence is not entirely apparent from surface observation. Certain facts, however, are worthy of note.

(1) The East Wing, lower story (Rooms 12–21) and Center Wing, lower story, eastern part (Rooms 22–25) are distinct structures, joined only by the secondary vault and rear wall of the passage between them. This is shown by the complete and finished, but now buried, external northwest corner of the East Wing, which may be seen faintly through the fill of the second-story platform, and the indication of a similar, complete northeast corner of the Center

Wing. Further confirmation is found in the protrusion of the coping courses through the weathered surface of the second-story platform above the passage between the two wings. The supposition is that the rear (north) facades of these buildings once stood exposed.

The foregoing suggests, but does not prove, that the second-story platform and its buildings are secondary to these parts of the lower story. This is further suggested by the secondary character of the stairway to the second story (see East Wing, above).

(2) The order of construction of the Northeast Wing (Rooms 1–11) and the East Wing is not clear at their juncture, but the temporary character of the east wall of the second-story platform behind the Northeast Wing (see Substructure, above), evidently in preparation for the construction of that wing, the unfinished nature of the northeast corner of the second-story platform, and the uncompleted Northeast Wing, all indicate that that wing was built after the East Wing.

The fact that the Northeast Wing and the sub-structural terrace before it were never completed suggests that the Northeast Wing was the last unit of Structure 1 to be built.

(3) The Center Wing, lower story, western part (Rooms 26–28) is secondary to the eastern part (Rooms 22–25), as shown by the complete but partially buried mask at the southwest corner of the eastern part, and by the erstwhile exterior medial molding across the eastern end of Room 26. Above the molding, the earlier facade seems to have been taken down and replaced by an ordinary vault end.

The cupboardlike wall depressions in Rooms 26 and 27 may be seen to be surrounded by loose fill rather than the solid masonry wall construction that might be expected. This suggests that this part of the second-story platform was constructed contemporaneously with the western part of the Center Wing.

(4) The juncture of the western part (Rooms 26–28) of the Center Wing and of the West Wing (Rooms 29–31) offers conflicting evidence as to building sequence. Up to the height of, and including, the lowest course of the medial molding, the West Wing appears to be earlier, but above this point the upper wall zone of Room 28 seems earlier. The sequence of building seems to have been as follows.

First, the lower walls of the West Wing were constructed to the height of the spring of the vault. It was then decided to join the older, eastern part of the Center Wing to the projected West Wing by means of Rooms 26–28. These rooms were carried to completion. Lastly, the vault and upper wall zones of the West Wing were built on the previously constructed lower walls. The West Wing and western part of the Center Wing seem thus to be contemporaneous.

Confirmation of this sequence is found in the juncture of the second-story platform, apparently started at the time Rooms 26–28 were built, with the rear wall of the West Wing where the platform is secondary to that wing. The originally planned, but subsequently blocked, doorway in the rear wall of Room 30 also indicates that the lower walls of the West Wing were built before the second-story platform was planned, but that the construction of Rooms 26–28 and the starting of the platform caused the blocking of the doorway, where there is no lintel, before the vault was placed on the West Wing.

(5) The South Wing (Rooms 32–36) cannot at present be related in time to the remainder of the structure.

The blocked doorway between Rooms 32 and 33, which is similar to the outer doorways to Rooms 33–35, the different style of the outer doorway to Room 32, and the change in design of the medial molding over the last doorway suggest that the lower walls of Rooms 33–36 were built prior to those of Room 32, although the vaulting of the entire wing seems to have been built as a unit. The lower level of the South Wing and its proximity to the western part of the Center Wing suggest that it can hardly be later than Rooms 26–28 and probably is contemporaneous or earlier than that part of the Center Wing.

(6) The Southwest Wing (Rooms 37–40) cannot at present be related in time to other parts of Structure 1.

(7) The second-story platform, which seems to have been built in stages and which was unfinished at the north and east, appears to be secondary or contemporaneous with the lower-story wings that rest against it. This suggests that each second-story superstructure is later than the lower story wing behind which each superstructure lies. E. H. Thompson (1889a, pp. 62–64), however, reports an early floor, 2 feet (.61 m) below the present floor, in connection with the earlier single-room structure enclosed within the walls of Room 58. He also reports finding the central part (Rooms 47–57) of the upper story to be 2 feet (.61 m) lower than the eastern part (Rooms 58–63) and implies that it may thus be earlier, presumably contemporaneous with the structure incorporated in Room 58. This suggestion of early construction raises the question, at present unanswerable, whether these structures may not have stood in this elevated position even before the lower story wings were built.

The outer face of the rear wall of the eastern part (Rooms 58–63) of the second story is of rough, undressed masonry that suggests that further construction was planned there. The outer face of the rear wall of the western part (Rooms 41–46) of the second story has faced stone in the lower zone, but no medial molding, and rough undressed masonry in the upper zone that also suggests further construction may have been planned. The foregoing and the unfinished northeast corner of the second-story platform indicate that the second story was still in process of growth at the time all work on Structure 1 ceased.

Miscellaneous observations not mentioned above are the following:

(1) Two floor layers were seen at a number of places in the East Wing. The upper layer is thick, running .05–.06 m; the lower may have been a preliminary work floor.

(2) A cleavage in the masonry hearting above the spring of the vault indicates that the vault of Room 18 was constructed prior to that of Room 19 and presumably before that of Room 20. This is apparently merely an indication of the manner in which construction was carried on, and these rooms are presumably contemporaneous.

(3) The eastern wall of Room 23 shows a blocked doorway. The fallen western wall may have had a similar doorway, no longer discernible.

(4) The two side doorways of the original triple entrance to Room 50 are blocked, leaving only the center doorway open.

Structure 2

(Old Edifice, Columnar Building, or Temple)

PLAN AND SECTION

See figures 3, 58.

SUBSTRUCTURE

Stairway. Remains of stairway at west apparently consisting of rather broad treads and normal risers. Usual construction for this kind of stairway, with line of dressed stone forming riser and stone fill that presumably was surfaced with plaster forming tread. Riser stones like wall stone in shape, but possibly a trifle thicker. No indication of balustrades.

Construction. Simple rectangular platform 1.5–2 m high. Platform built of large loose stone fill presumably retained by walls of roughly shaped or roughly dressed stone, although no retaining walls are now visible. Small stone surface, the usual understratum of a finished floor, indicates that plaster flooring once covered platform. Much of body of platform taken up by bedrock outcroppings.

SUPERSTRUCTURE

Plan. See figure 3.

Section. See figure 59.

Elevation. See figure 60. Portion of west facade.

Base Molding. See figures 59, 60. Typical three-member molding with colonnettes in middle member.

Floor. Some floor preserved in Room 3. Reddish brown in color.

Walls. Thickness at jambs. 55–.58 m with some increase toward ends of rooms. Rear wall .80 m, transverse walls .95 m thick.

Outer facing stone well dressed but not so well fitted as that of Structure 1 (fig. 61). Inner facing stone only roughly dressed. Tendency to use relatively large stones with long dimension vertical in both outer and inner wall surfaces. Otherwise, stone is rather smaller than elsewhere at site.

Slightly recessed course of stone immediately beneath offset at spring of vault, a frequent feature in Puuc buildings, is pronounced at places in Structure 2.

Doorways. Simple doorways with stone lintels (fig. 61). Width at bottom runs .90–1.10 m with tendency for doorways to narrow slightly at top. One jamb monolithic but others are of two or three stones, all running full width of jamb.

Wall Depressions. All varieties of cordholders previously seen (see Str. 1) as well as two-holes-in-single-stone (fig. 62, left; and see Sabacche, Str. 5, North Wing). Tongue-at-corner variety completed with small stone peg (fig. 62, right). All occur on inner wall surfaces at each side of doorways.

Rod-socket depressions in jambs (see Str. 1) also present.

Vaults and Beams. Vaults are typical of classic Puuc building, all having arched soffit slopes, slight inward slope at ends, offset at spring and beneath capstones, and spring course deeply tailed in (.50 m) on level above primary course of medial molding (fig. 59). Small offset beneath capstones hidden some places by plaster, some places showing. Mixture of semispecialized and poorly specialized vault stones (see Str. 1, East Wing) which are slightly better faced than interior wall stone but not finely dressed.

Beam holes located beneath spring of vault, two-thirds height of vault, and in course below small offset (fig. 59).

Moldings. Typical three-member medial molding with colonnettes in second member (figs. 59–61). Cornice molding similar plus coping course.

Roof. Large number of lime-concrete slabs that formed roof surface lying loose on top of building. For some reason this final roof stratum is better preserved than most. Stratum about .05 m thick, badly pitted, but still very hard.

Displacement of surface stratum presumably from action of roots of vegetation growing on roof.

Decoration. Split columns in upper facade zone at both front and rear of building (figs. 59–61).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

North wing and adjacent room (Rooms 1–3) apparently secondary to rest of building. Primary course of medial molding extends across southern end of Room 3, and wall stone below molding is like that on exterior wall faces. Molding serves as offset at end of vault; offset therefore one course lower than spring level elsewhere in building.

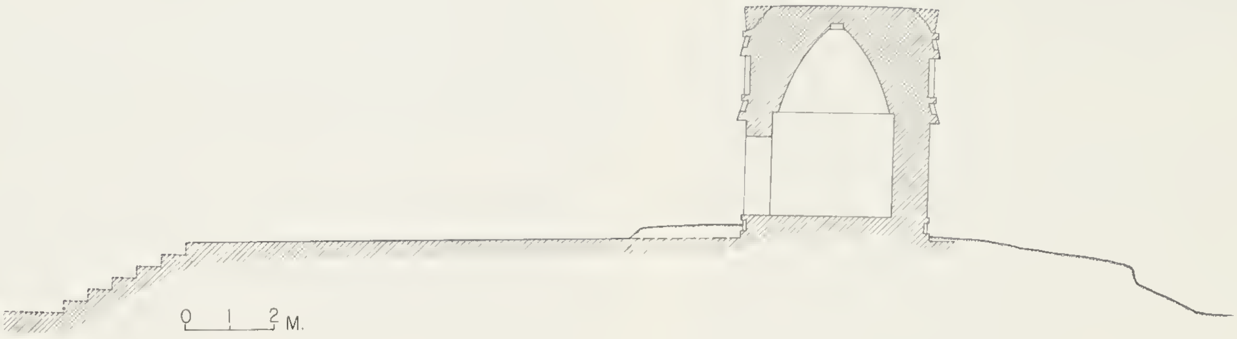


Figure 58. Labna, Structure 2. West-east section (see fig. 3).

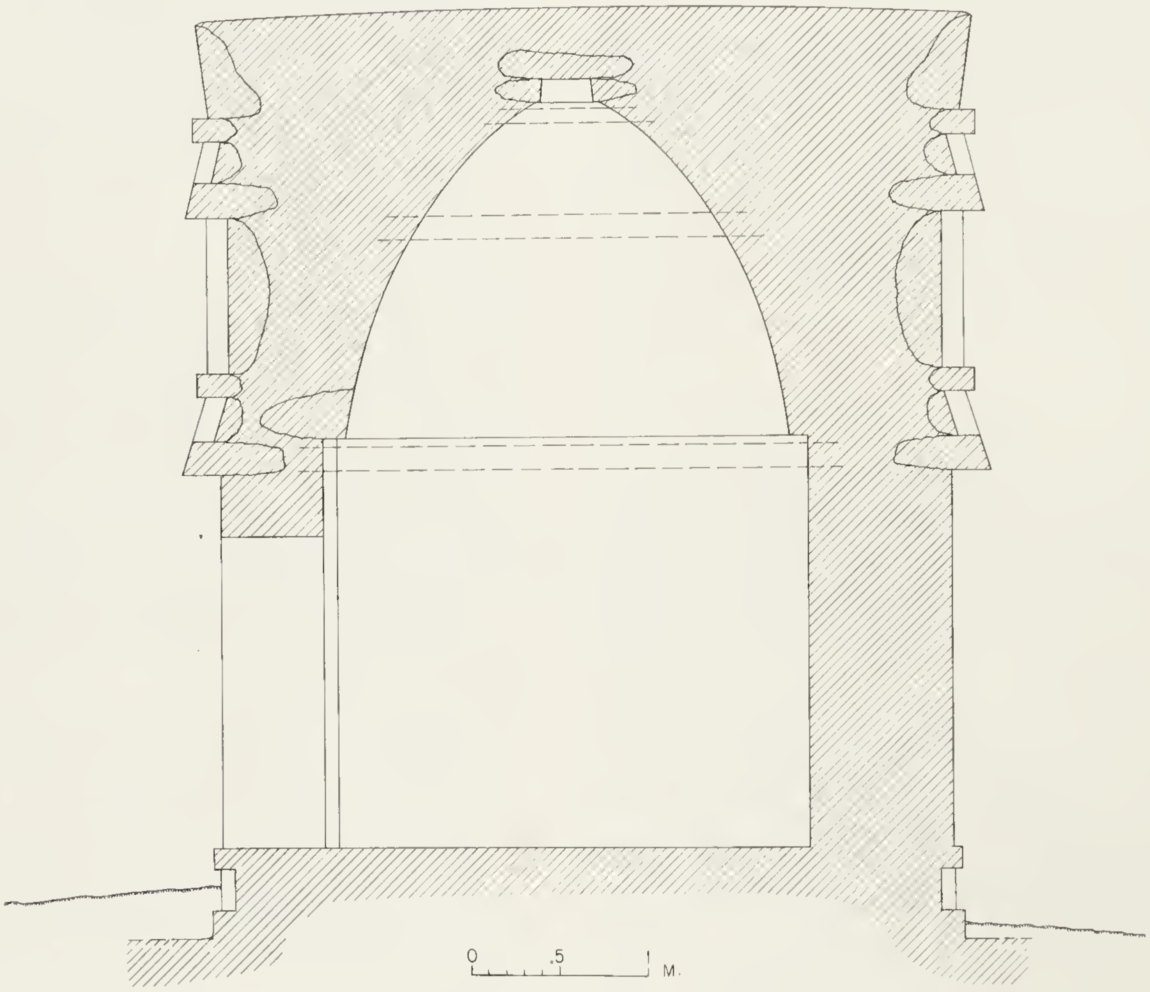


Figure 59. Labna, Structure 2. Section through Room 6.

Wall stone of south end wall of Room 3 below molding runs behind masonry of longitudinal walls few centimeters, but from there to outer wall surfaces stone missing gives appearance of contemporaneous joints. Slightly different color of mortar, however, indicates two building periods. At west molding course runs under longitudinal wall, with old corner molding stone in place, whereas at east molding does not penetrate wall. Above molding no division in construction discernible.

Impossible to be certain of exact procedure in construction here, but every indication that Rooms 4–8 were built first with north end wall (i.e., south wall of Room 3) left unfinished to await construction of Rooms 1–3. Conditions very similar to those pertaining to South Group Structures S1 and S2 (see Strs. S1, S2, Secondary Construction . . . , below). Uniformity of work in both parts of building suggests little time elapsed between construction of two parts.

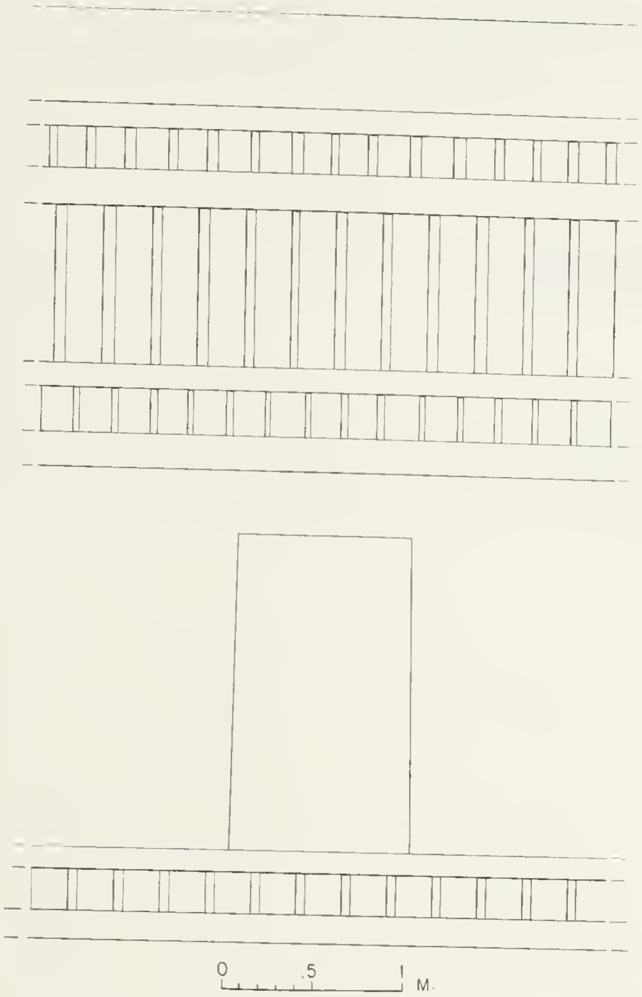


Figure 60. Labna, Structure 2. Restored elevation of part of west facade.

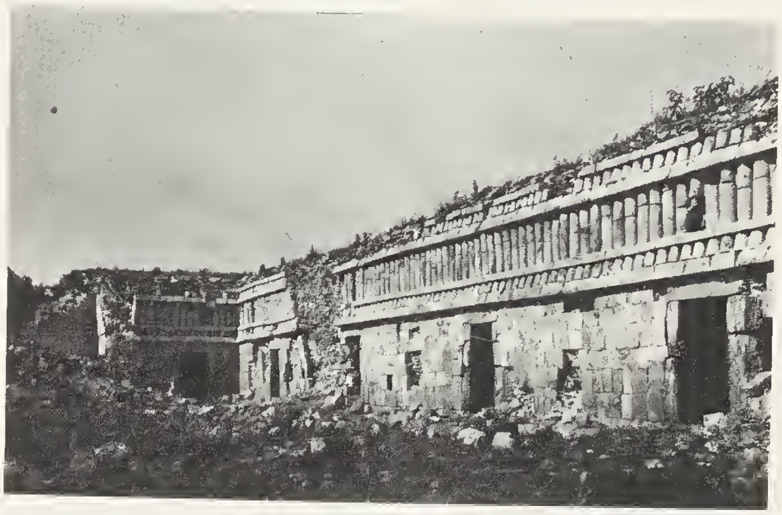


Figure 61. Labna, Structure 2. South and west facades, looking northeast.

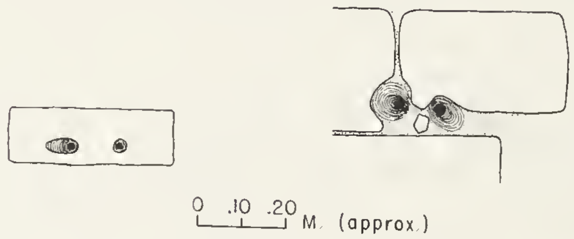


Figure 62. Labna, Structure 2. Two varieties of cordholders.

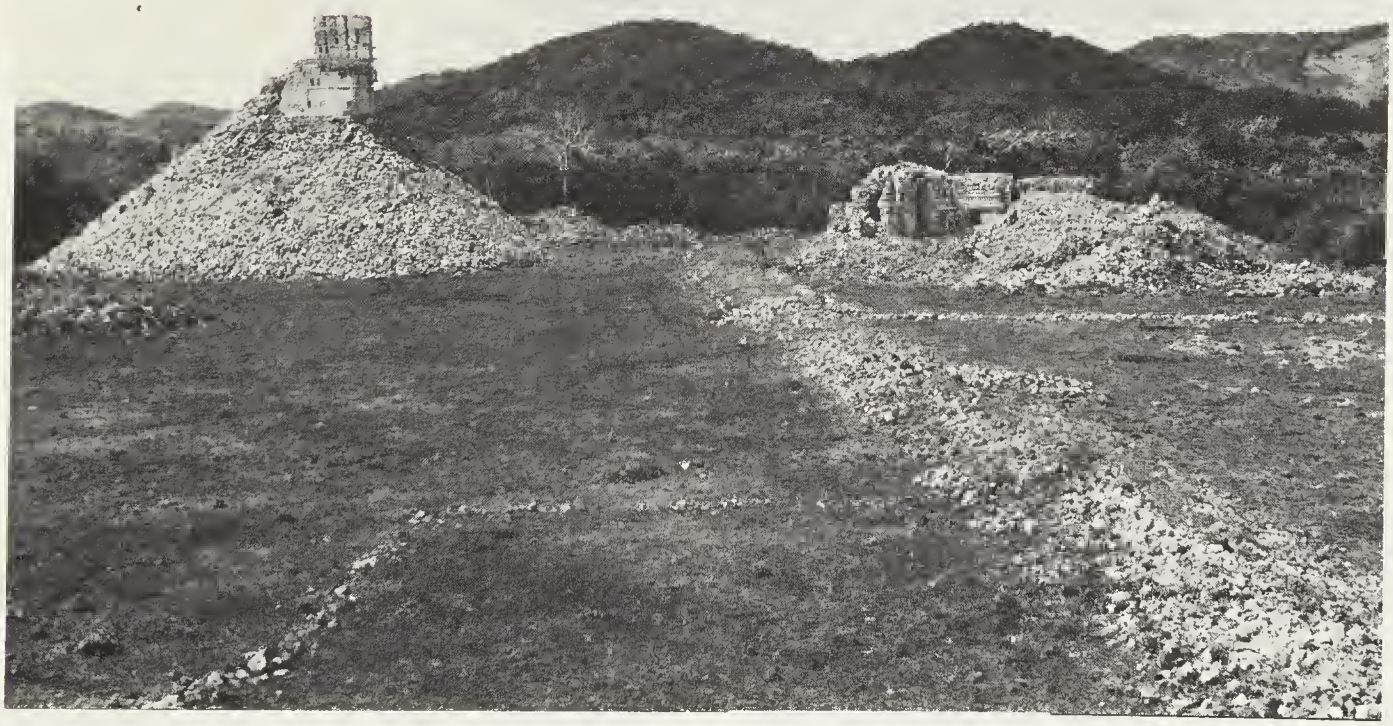


Figure 63. Labna, Temple Group, looking south from Structure 1. Structure 4 at left, Structures 11 and 13 at right, and remains of causeway running from center of picture to lower right.

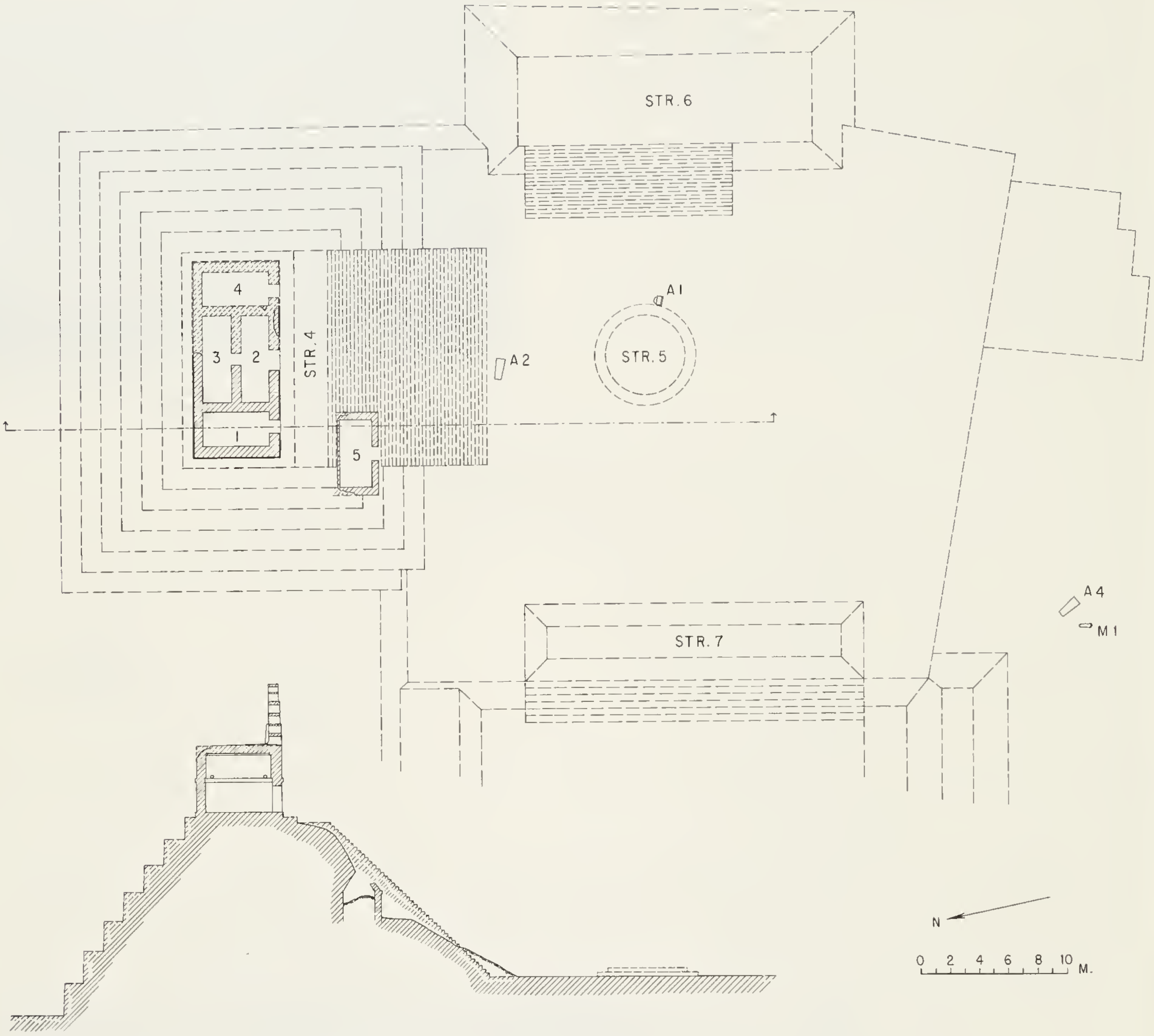


Figure 64. Labna, Court of Structure 4. Plan of court and adjacent structures and section through Structure 4.

GROUP OF STRUCTURE 4 OR TEMPLE GROUP

(Structures 4–13)

There is considerable question in my mind whether this assemblage of structures would not be better labeled as more than a single group (figs. 3, 63). As with Structure 1, however, we know so little of the function of the courts and buildings that make up the assemblage that it seems as well at present to treat them as a single group. All of the altars (Altars 1–4) found at Labna are associated with this group (see Monuments, below).

Court of Structure 4

PLAN

See figure 64.

CONSTRUCTION

Level platform, presumably once floored with lime cement, elevated about 2.5 m above natural ground level. Exposed terrace wall on south is of usual construction (see Str. 1, Substructure, above) and approximately vertical.

Main approach to court no longer apparent. Might be expected at south but no trace of stairway observed there. Possible that approach was by means of stairway to Structure 7 and through that building.

Structures 6 and 7 too fallen to exhibit any details without excavation.

STRUCTURE 4
(Temple, Mirador)

PLAN, SECTION, AND ELEVATION

See figures 64, 65.

SUBSTRUCTURE

Stairway. Only visible signs of stairway are traces of what may have been side walls of staircase. These walls, found on south side, are centered in relation to superstructure, and indicate stairway had width of approximately 15 m. No traces of balustrades as suggested by Mariscal (1928, fig. 27).

Construction. Reason to believe that substructure was rectangular stepped pyramid, and not elliptical as suggested by Reygadas (see Mariscal 1928, fig. 29). While pyramid is now little more than mass of boulders (fig. 63), occasional terrace walls can be made out and appear straight rather than curved at ends of structure. Also seem to be remains of corner of terrace at southeast (fig. 66).

Terrace heights impossible to ascertain without excavation, other than top one which is 1.50 m. Terrace below that probably 1.8–2.0 m; consequently indications are of six or seven terraces, probably increasing somewhat in height toward bottom of pyramid (fig. 64, 65).

Construction apparently typically of loose fill retained by walls of roughly shaped, but not dressed, stone laid in mortar. No traces of plaster coating of walls, or of decoration, but former probably originally present.

SUPERSTRUCTURE

Plan. See figure 64.

Sections. See figures 64, 67; and Mariscal 1928 (fig. 28).

Elevation. See figure 65; and Mariscal 1928 (fig. 27). Substructure restored, and east end of superstructure restored as duplicate of standing west end.

Base Molding. Single course of well-faced stone (figs. 65, 67, 68). Individual stones run .30–.50 m long by .15–.27 m deep.

Stairway. Single step in front of building (figs. 64, 67).

Floor. No floor visible. Probably no step-up to rear room (see Mariscal 1928, fig. 28).

Walls. Run .65–.70 m thick at jambs and elsewhere. Recessed course beneath spring of vault plainly seen (fig. 67). Outer wall stone not carefully dressed (fig. 68) and inner even cruder (see Spinden 1913, pl. 4:2). Stone tends to be smaller than average at site.

Lower chamber (Room 5) wall thickness .48 m at jambs with some increase toward ends of room. Wall stone of same grade as that in upper building.

Doorways. Western doorway (Room 1) is only one remaining intact. Width .85 m at bottom, .75 m at top. Stone lintel and usual full-width jamb stones (fig. 68).

Central front doorway (Room 2) standing in times of Stephens (1843, 2:50–51), E. H. Thompson, and Rickards (1910, p. 57). Unpublished photographs of Thompson's show doorway to have been about 1.35 m wide. Western jamb a single stone, eastern jamb one long stone with small stone immediately beneath lintel.

Doorway of lower chamber (Room 5) about 1 m wide at bottom, .90 m at top. Construction (figs. 66, 69) same as upper west doorway (Room 1).

Vaults and Beams. Spring at level of top of medial molding, well tailed in spring course, small offset beneath capstones, concave soffit slopes, but concavity minimal owing to narrow rooms (see Spinden 1913, pl. 4:2).

Facing of stone about same as that of walls. High percentage of nonspecialized vault stone, but some semi-specialized stone. Capstones well squared, but undersurfaces show natural cleavage face rather than dressed surface.

Somewhat unusual features are nearly vertical ends of vaults (fig. 67), and front and rear vaults (Rooms 2 and 3) springing from same level, with the stones in spring course in medial wall not so deep as to conflict (see Spinden 1913, pl. 4:2). Same spring level seems to go with lack of rise in floor level from front to rear room.

Usual beam holes in spring course (fig. 67) and possibly in course below small offset at top of vault, but latter is doubtful.

Vault of lower chamber (Room 5) crudely constructed. Spring course of large stone, roughly shaped. Remainder of vault, including ends, also of rough unshaped stone (fig. 70). No capstones remaining but may have been in time of E. H. Thompson (1889a, pp. 105–113). Thompson thinks finished vault stone stripped off when chamber was filled (see Secondary Construction . . . , below), but offset at spring of vault makes this seem incorrect; as does presence of three dressed vault stones in position among otherwise crudely worked stones.

Moldings. Simple rectangular medial molding immediately above lintels of doorways (figs. 65, 67, 68).

No trace of cornice molding and almost surely was none.

Lower chamber (Room 5) shows same style rectangular medial molding as on upper building (fig. 66). Molding too low to have crossed above lintel, thus suggesting rise over doorway (fig. 69) such as that on Structure 1, South Wing (see above). Unpublished E. H. Thompson photograph confirms a wall stone just above and flush with lintel and one molding stone over and well above lintel.

Roof. Much of roof preserved because of debris from flying facade. Slight camber of upper surface plainly seen (fig. 67).

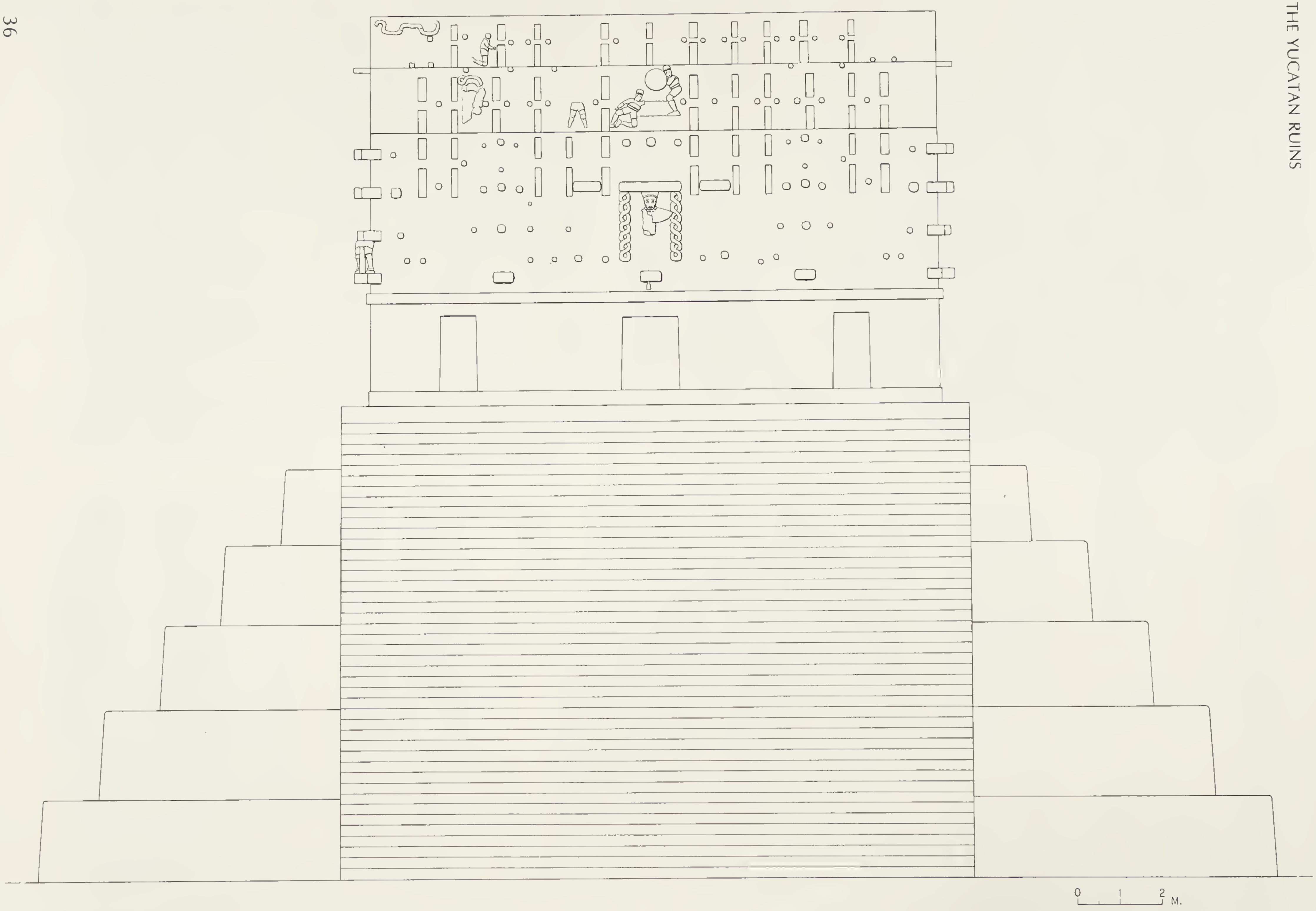


Figure 65. Labna, Structure 4. South elevation (restored).

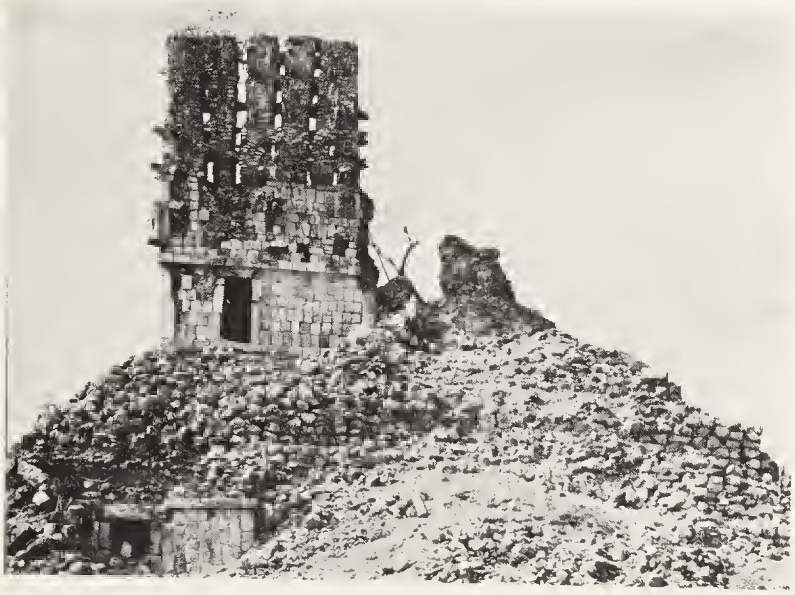


Figure 66. Labna, Structure 4. View from south, showing standing west end of superstructure, lower chamber (Room 5), and remains of upper terraces of substructure.

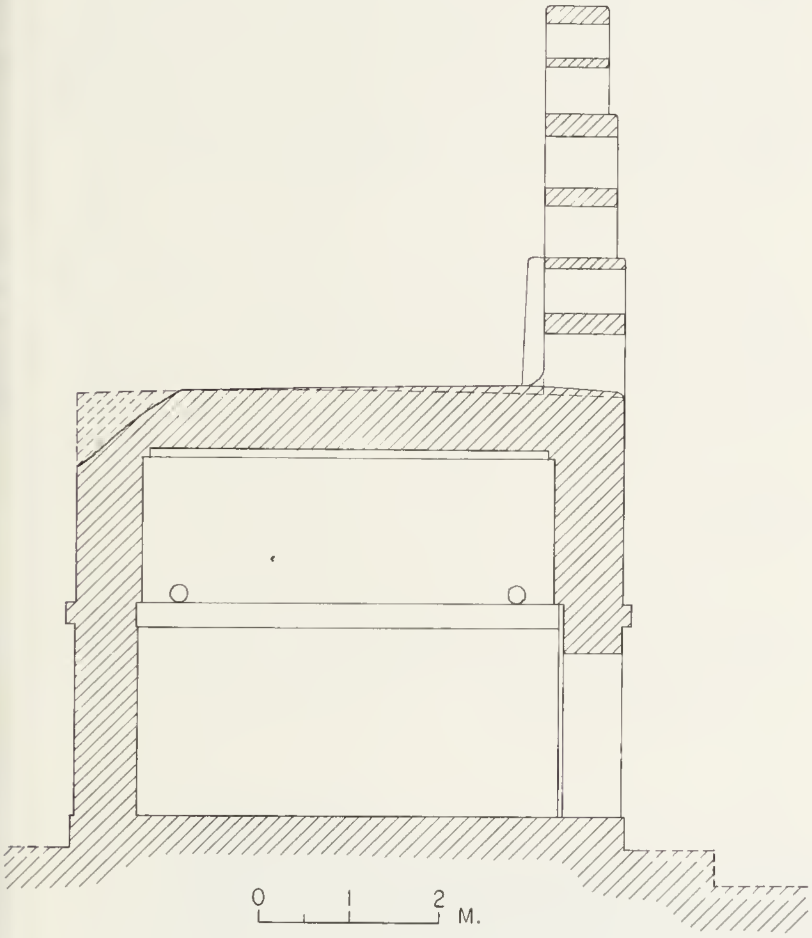


Figure 67. Labna, Structure 4. Section through Room 1.

Plaster stratum runs under base of flying facade showing leveling off (work floor) before erection of flying facade. Thickness of roof from underside of capstones to roof surface is .60 m, with upper .12 m a well-marked stratum of small stone and mortar whereas larger flat slabs in mortar lie below. This typical roof construction clearly shown in fallen fragment of roof and flying facade masonry.

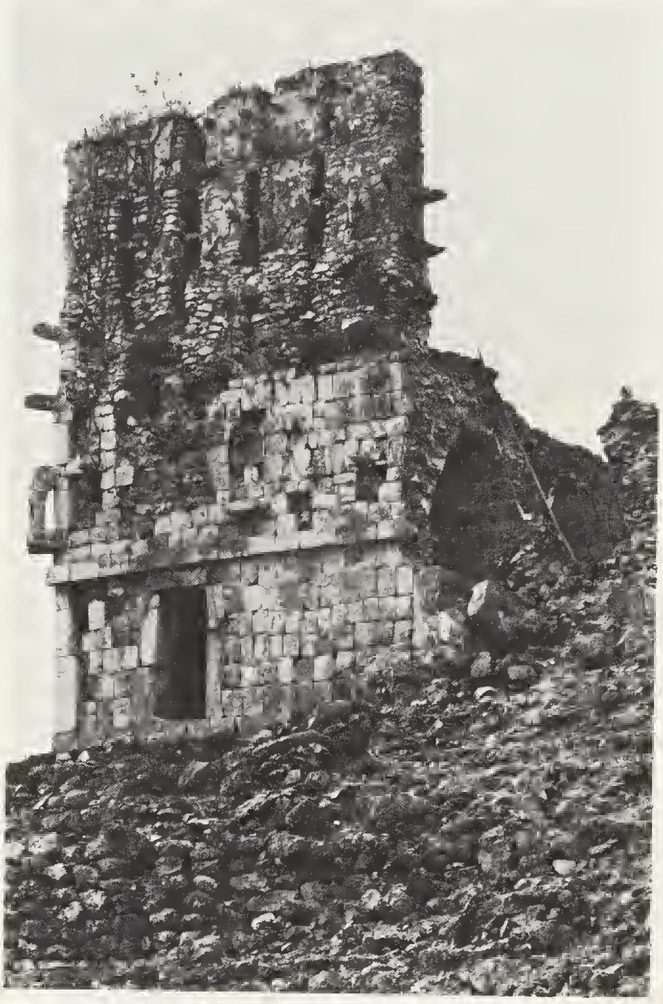


Figure 68. Labna, Structure 4. Standing part of temple building with terrace wall in foreground, looking northwest.

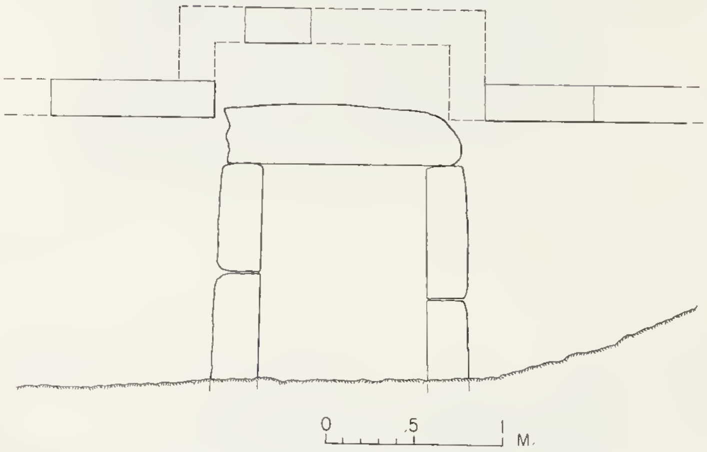


Figure 69. Labna, Structure 4. Elevation drawing of doorway and medial molding of Room 5.

Roof Structure. Typical perforated flying facade (figs. 65, 67). Built entirely of rough unfaced stone (fig. 68). Wall surfaces liberally coated with stucco or plaster in addition to stucco forming decoration. Small buttress behind western (and presumably eastern) end probably to carry end decoration but also to strengthen. Two setbacks across front of flying facade. Both front and west end carry great number of stone pegs or tenons to support stucco decoration. Flying facade apparently stands virtually to full height,

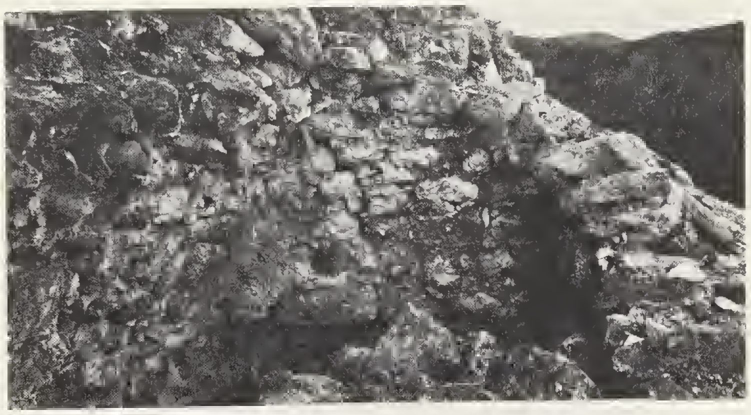


Figure 70. Labna, Structure 4. Remains of vault and east end of Room 5, looking east.

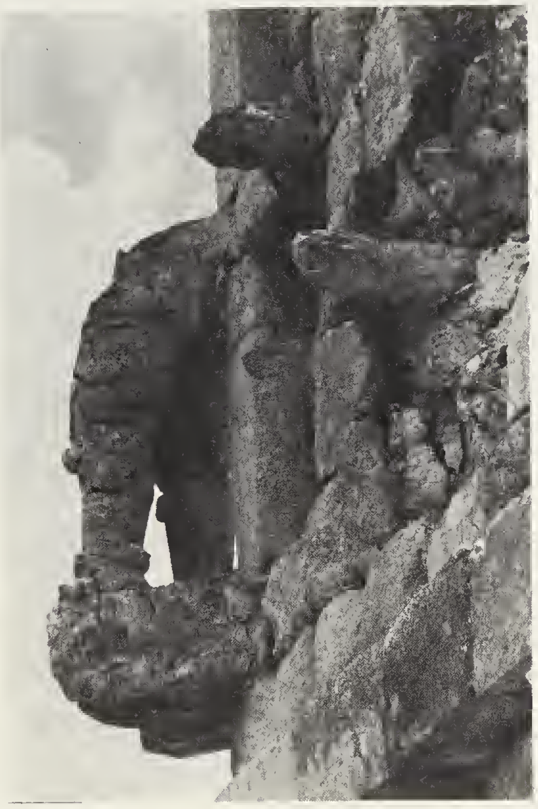


Figure 71. Labna, Structure 4. Remains of stucco figure at southwest corner of building.

but slightly less than half the length of facade remains. Stephens (1843, 2:50), E. H. Thompson (unpublished photographs), and Rickards (1910, p. 57) show much more of facade standing in their time.

Decoration. Upper zone of south facade and roof structure carry many fragments of stucco modeling in low relief, high relief, and full round (fig. 65). Subject matter is mostly anthropomorphic and curvilinear design, such as plumes, that probably served as ornament in connection with dress of human figures. Three or four fragments of legs and waists remain, the best preserved at southwest corner (fig. 71) portraying loin cloth *(maxtli),* rosettes at knees, and ankle bindings. Large number of stone tenons indicates a mass of decoration of this sort on south facade and ends of roof structure. Traces of red paint on front, in windows, and on rear of flying facade indicate liberal use of this medium.

Illustration and account by Stephens (1843, 2:50–53) and photographs and description by E. H. Thompson (1889a, pp. 97–104) show much more decoration present at times of their visits. Features of particular interest recorded by them, and no longer visible, are row of death's heads along top of roof structure *(tzompantli?),* two human figures with ball between them (undoubtedly picturing ball game), large seated figure over center doorway, and blue as well as red paint on headdress of this principal figure. Thompson seems also to imply that there may have been decoration in lower wall zone at each side of doorways.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Lower chamber (Room 5) gives every indication of belonging to earlier period than present pyramid and superstructure. E. H. Thompson (1889a, pp. 105–113) reports he found chamber filled with large rough stone, that similar stone was in place before chamber so that doorway was hidden, and that character of this fill was definitely artificial, rather than chance debris of disintegration. He attributes filling of lower chamber to degree of support necessary to carry overburden of present pyramid, and states that this chamber with its quadrangular substructure and stairway at south was original structure.

Present indications are that Thompson is correct in stating chamber was intentionally filled. Also appears that chamber was at least partially buried. What seems to have been western wall of later staircase abuts front wall of lower chamber at point between doorway and southwest corner (see fig. 64), thus indicating most of early building was buried beneath stairway. No indications now discernible of separate substructure and stairway of lower chamber.

Secondary character of flying facade (see Roof, above) is matter of method and procedure in construction and suggests no significant time interval between building of superstructure and its roof structure or any change in original plan of building.

STRUCTURE 5

PLAN AND SECTION

See figures 64, 72a.

CONSTRUCTION

Low circular platform in front of, and on axis of, Structure 4. Apparently two steps high but some uncertainty concerning upper step. Steps faced with well-dressed stones cut with curved faces (fig. 72b), and platform surface presumably finished with usual plaster flooring.

Structure seems to be ceremonial platform, possibly sacrificial in nature. Altar 1 (see Monuments, below) now rests at eastern edge of platform, but may once have been at center.

Structure 11

(Gateway, Portal, Arch)

PLAN

See figure 3.

SUBSTRUCTURE

Stairways. No remains of stairways visible at time of my visit. Height above court level of Southeast Wing (Rooms 7, 8) and South Wing (Rooms 9–13) indicates there must have been steps to reach these rooms, and stairways shown in figure 3 are restorations suggested by contours of debris. Since my work there, excavations by Instituto Nacional de Antropologia e Historia de Mexico have determined the nature of the stairs leading to the Portal which may now be seen restored (see Mexico 1958, p. 57; Mexico 1962, pp. 27–29; Piña Chán 1963a, p. 127; G. F. Andrews 1975, figs. 252, 261).

Construction. Floor of inner court about on level with outer (southeast) court and both about .50 m above ground level. North (Rooms 1, 2), East (Rooms 3–6), and West (Rooms 14–18) Wings rest on level of inner court. Southeast and South Wings stand on platform about 1 m above court level (fig. 73). No substructural wall visible.

SUPERSTRUCTURE

EAST WING (Rooms 3–6)

Plan. See figure 3.

Section. See figure 74.

Elevation. See figure 75, west facade of Room 5. Decoration on lower wall zone is duplicated at right of doorway (see Proskouriakoff 1946, pl. 16, at left; Mexico 1962, p. 31).

Base Molding. Plain course of dressed stone (figs. 74, 75, 78).

Doorways. Simple doorways with stone lintels except entrance to Room 5 which has carved jambs and rounded front of lintel (figs. 74–76).

Wall Depressions and Projections. A single-tongue variety of cordholder visible.

Fragment of ring cordholder in Room 4 (fig. 77). Set in wall at level of underside of lintel .58 m south of doorway.

Vaults and Beams. Normal (see fig. 74).

Moldings. Decorated moldings on west facade (figs. 74, 75, 78). Only bottom member of cornice molding remains.

East facade now fallen, but E. H. Thompson photograph shows simple three-member moldings, the lowest member of the cornice molding made of two courses of stone.

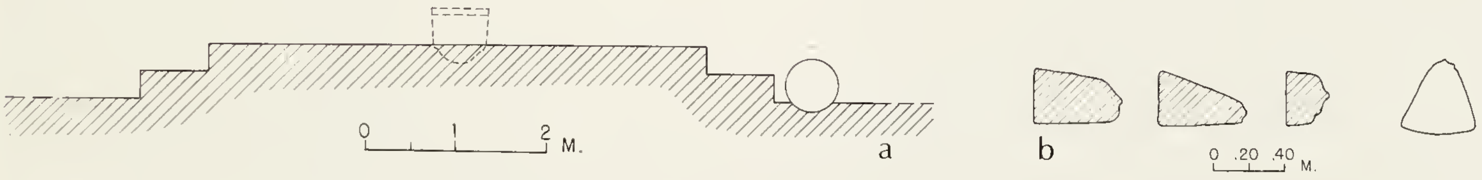


Figure 72. Labna, Structure 5: a, restored section showing Altar 1 at eastern edge of platform, where found, and at center of platform where it may originally have stood; b, plan and sections of typical facing stones from perimeter of platform.

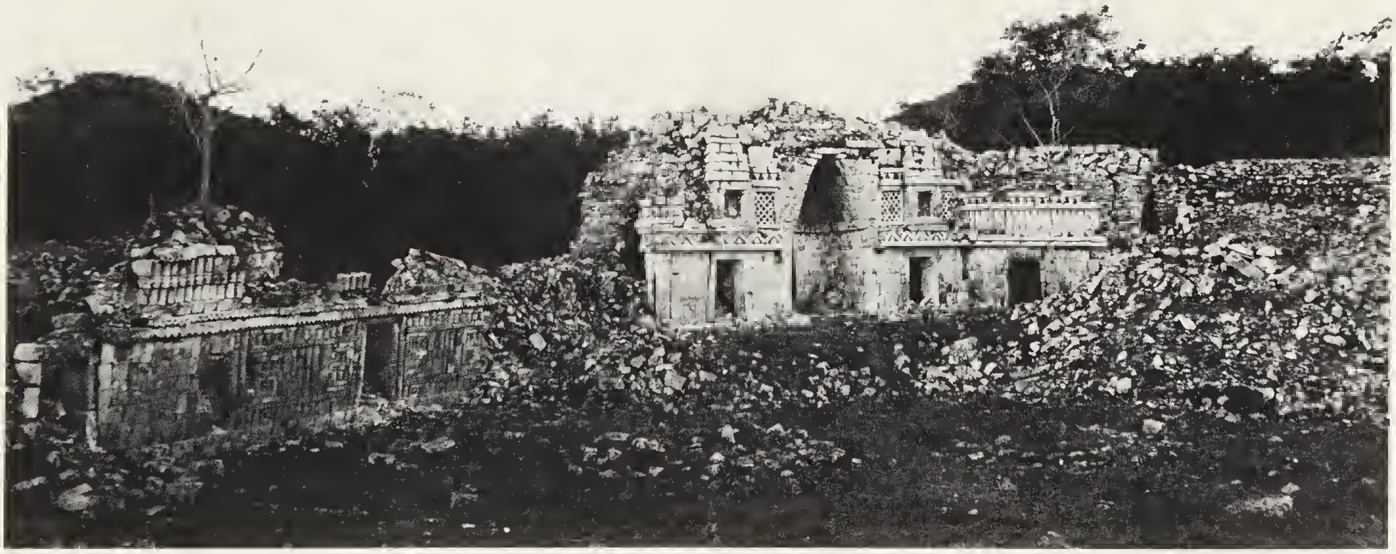


Figure 73. Labna, Structure 11, looking south from Structure 13.

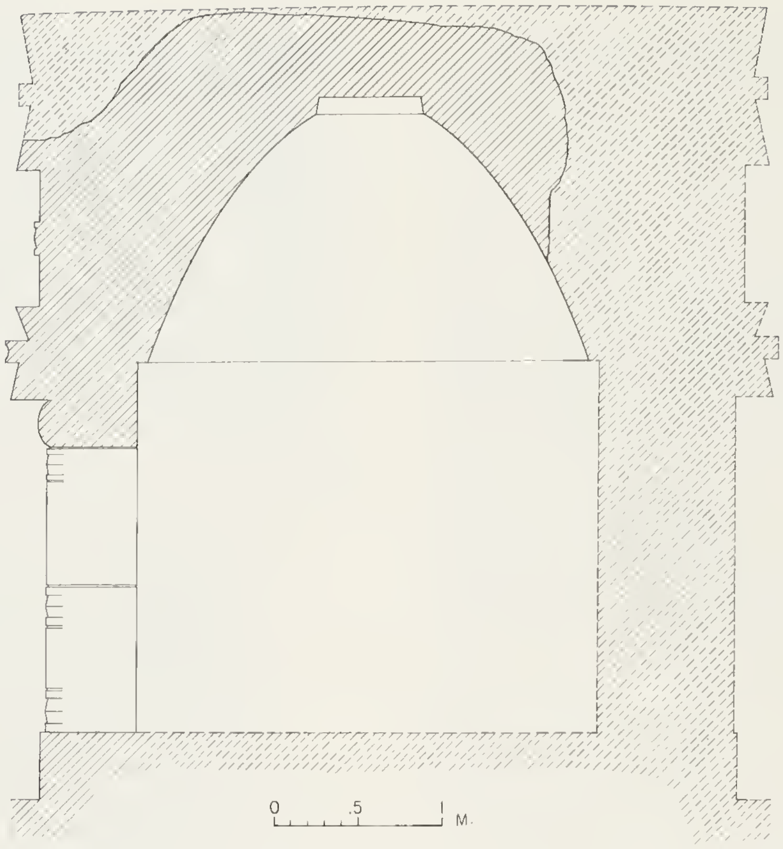


Figure 74. Labna, Structure 11, East Wing. Section through Room 5.

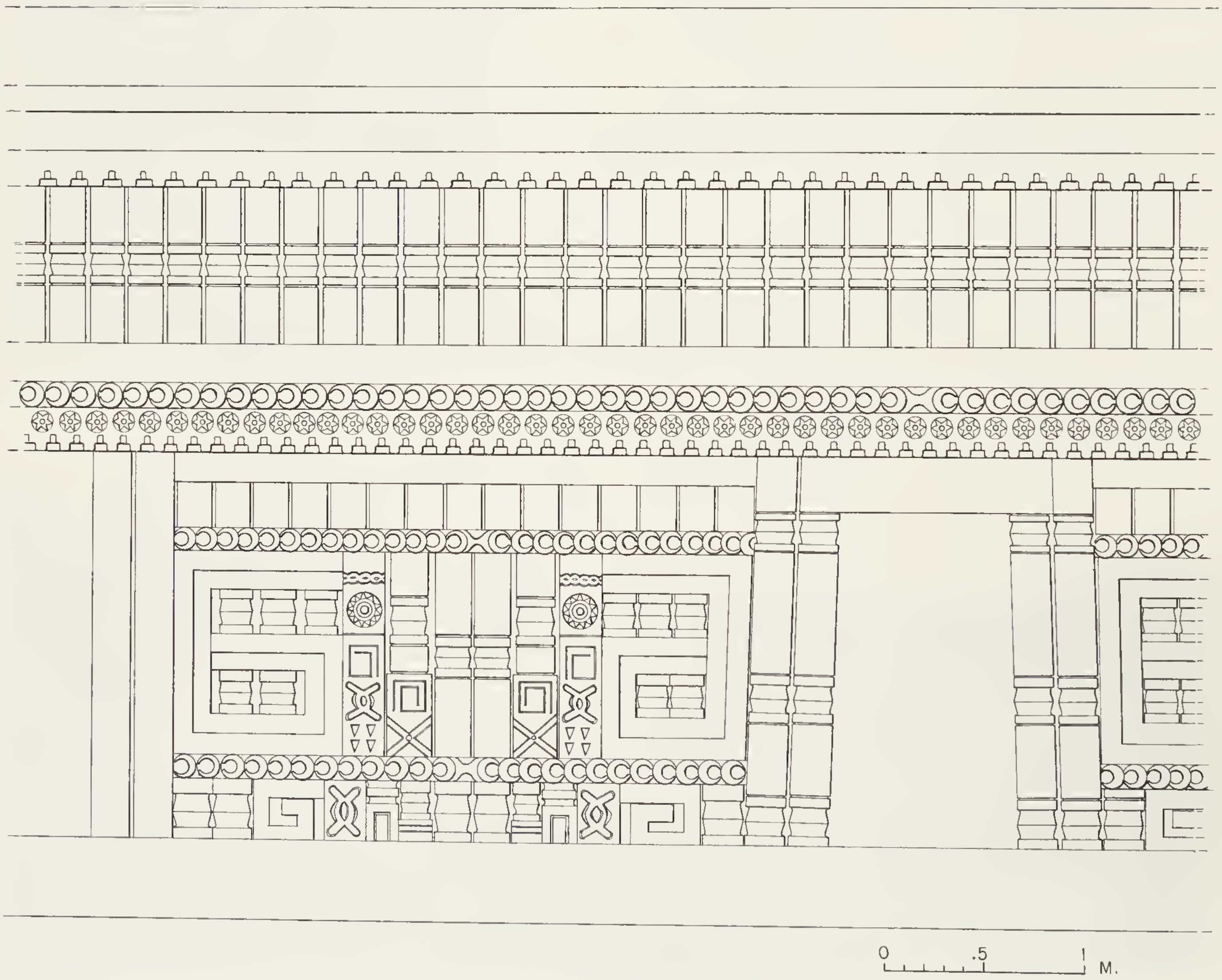


Figure 75. Labna, Structure 11, East Wing. Restored elevation of part of west facade of Room 5.

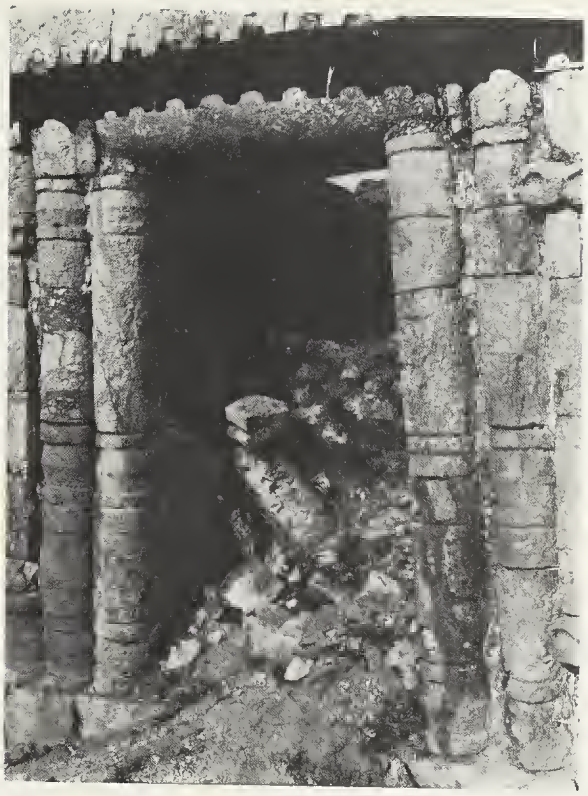


Figure 76. Labna, Structure 11, East Wing. Doorway of Room 5, showing jambs carved to simulate banded split columns and rounded edge of lintel (cf. fig. 78).

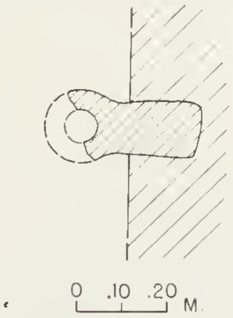


Figure 77. Labna, Structure 11, East Wing. Section of cordholder in wall at south side of doorway in Room 4.

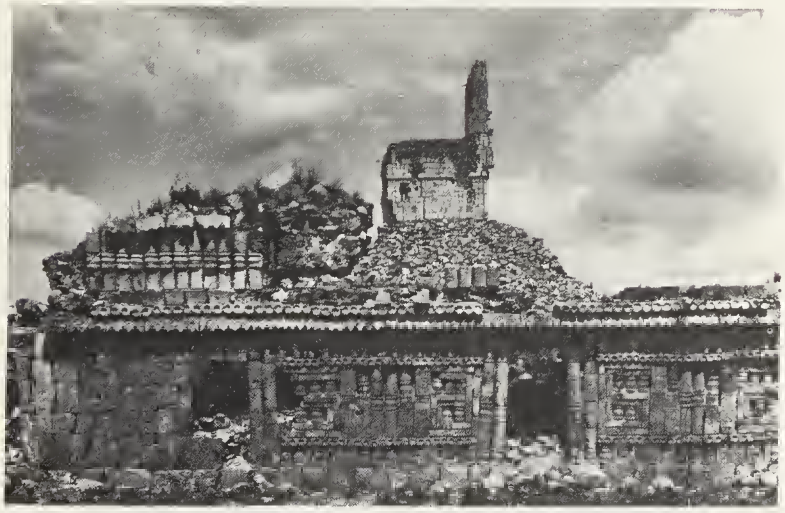


Figure 78. Labna, Structure 11, East Wing. Portion of west facade, showing south jamb of doorway to Room 4 (far left), doorway to Room 5, moldings, and exterior wall decoration. Structure 4 in background.

Decoration. Decoration on lower wall zone of west facade outside Room 5 is primarily mosaic of separate carved elements, but certain amount of shallow carving on wall stone (figs. 75, 78). Carved fronts of jambs and rounded front of lintel unusual (fig. 76).

Split columns with spools halfway up extend across upper wall zone of west facade (fig. 75). E. H. Thompson photograph shows similar columns in groups of three separated by plain wall areas in upper wall zone of east facade.

SOUTHEAST WING (Rooms 7, 8, and Portal)

Plan. See figure 3; and Mariscal 1928 (fig. 26).

Sections. See Mariscal 1928 (figs. 23, 24).

Elevations. See figures 79–81; and Mariscal 1928 (fig. 25); Marquina 1928 (foll. p. 66); Proskouriakoff 1946 (pl. 16); Mexico 1962 (pp. 27–29). Figure 79, northwest elevation, based on Mariscal and Marquina drawings, photographs, and measurements on adjoining South Wing. Undoubtedly some inaccuracies. Partially restored.

Southeast elevation by Marquina (1928) inaccurate in places. Base molding, cornice moldings, and roof comb should be same as shown in northwest elevation (fig. 79). Upper zone decoration approximately correct.

Base Molding. Single course of dressed-stone offset .04 m from walls. Extends across Portal entrances.

Walls. Normal, with wall stone inside Portal well cut and of dressed variety used for outer wall surfaces.

Doorways. Normal, with stone lintels, but with pronounced narrowing at top (figs. 79, 80).

Wall Depressions and Projections. Hemispheroid rod sockets in jambs of doorway of Room 8. No other depressions noted.

Crude ring cordholder (see East Wing, above) in Room 7 just south of doorway.

Vaults and Beams. Vaults in Rooms 7 and 8 are normal (see Mariscal 1928, figs. 23, 24; but no step-down from doorway to room floor). Portal vault on grand scale but otherwise normal in construction (see Mariscal 1928, fig. 25).

Only beams were in Portal. Three beams at level one course below small offset under capstones (fig. 79).

Moldings. See figures 79, 82; and Proskouriakoff 1946 (pl. 16).

Roof. Some probably remaining but hidden by debris from roof comb.

Roof Structures. Three badly fallen roof combs, or sections of roof comb, one over each room and at higher level over Portal (fig. 79). Roof combs over Rooms 7 and 8 definitely of perforated variety with well-formed windows of cut stone. Perforations in roof comb over Portal questionable but probable. Possibility of small molding on roof combs over Rooms 7 and 8 similar to molding on roof comb on South Wing (see fig. 84).

Original height of roof combs unknown. E. H. Thompson (1889a, p. 79) states that roof comb over Portal stood to height of 4 feet (1.22 m).

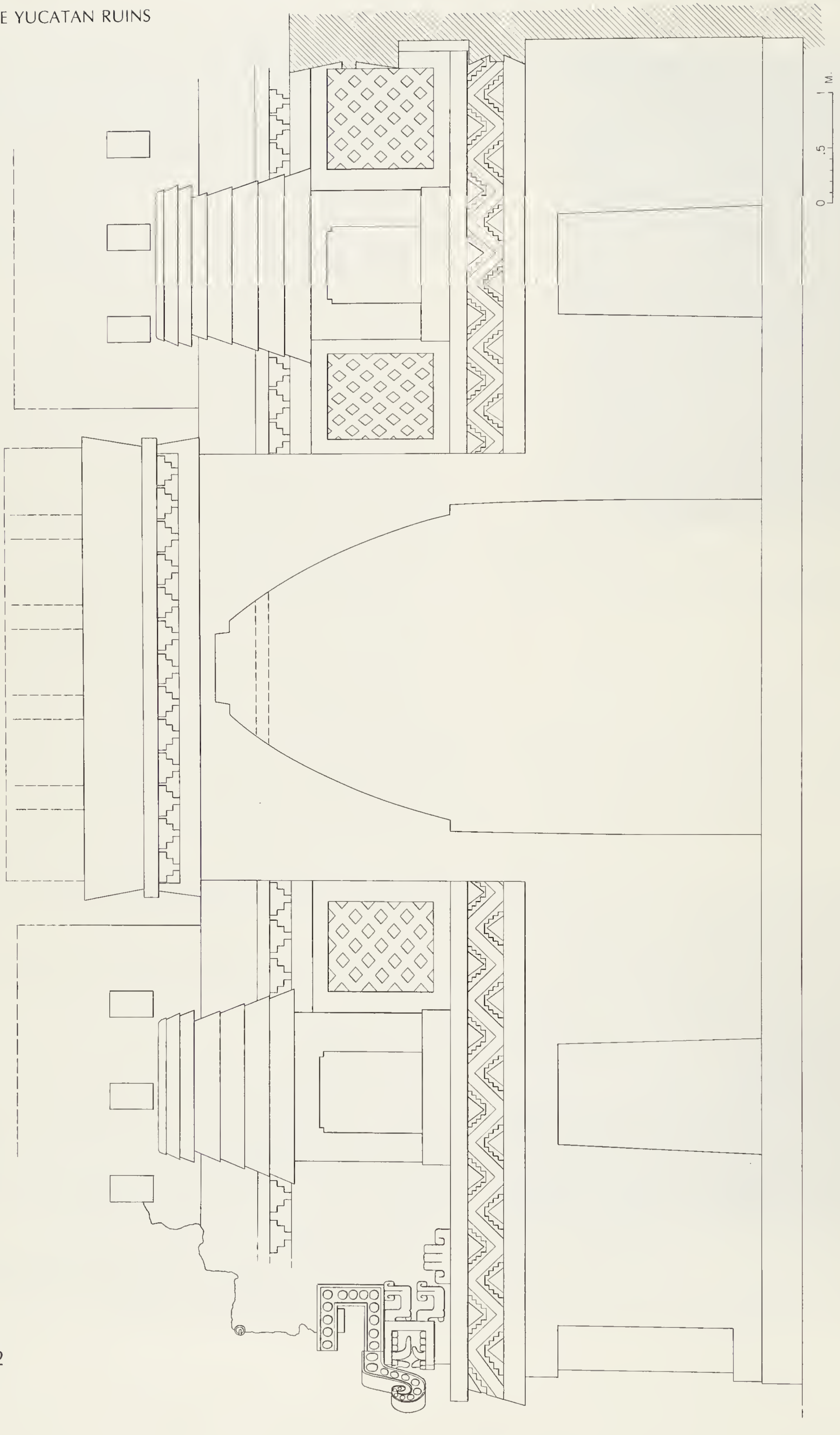


Figure 79. Labna, Structure 11, Southeast Wing. Restored elevation of northwest facade of Rooms 7, 8, and Portal.

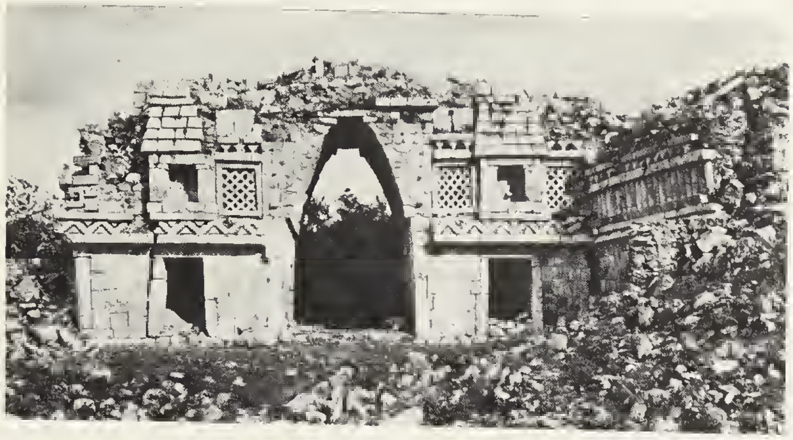


Figure 80. Labna, Structure 11, Southeast Wing. View from northwest, showing Portal, entrances to Rooms 7 and 8, upper facade decoration, and remnants of roof comb.

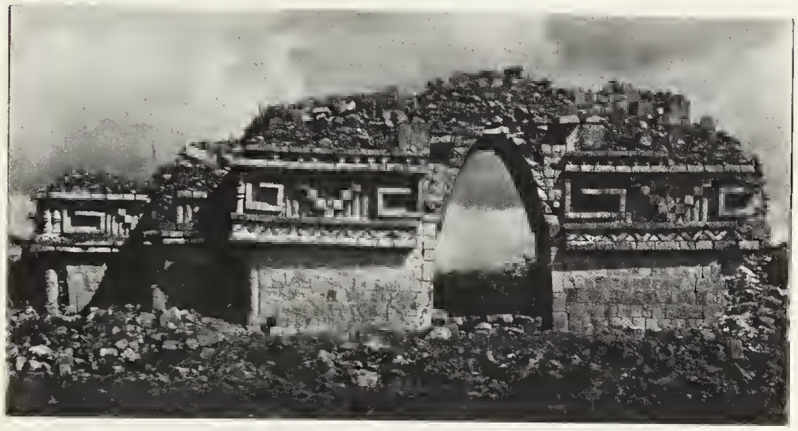


Figure 81. Labna, Structure 11. View from southeast, showing Portal, and facades at ends of Rooms 9 and 12 (see fig. 3).

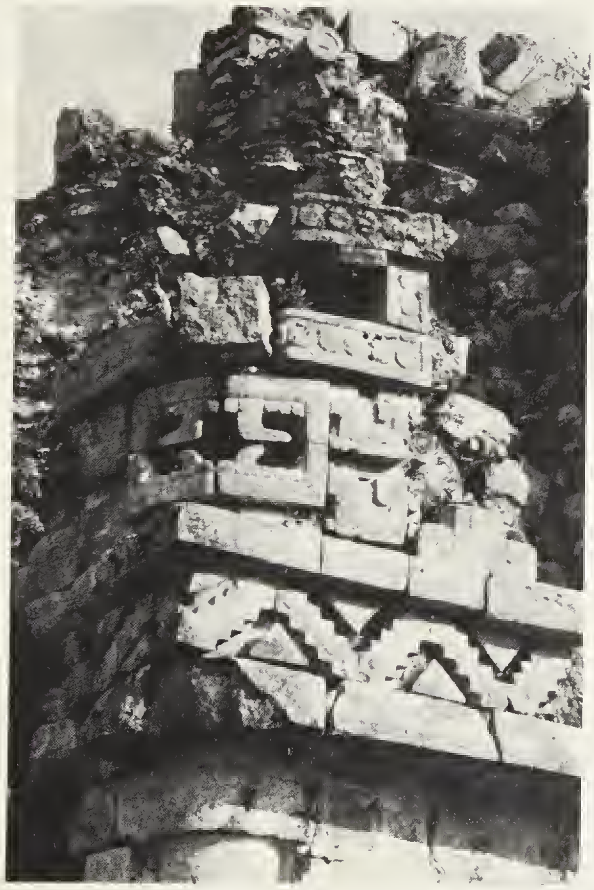


Figure 82. Labna, Structure 11, Southeast Wing. North corner, showing medial molding and remains of mask.

Proskouriakoff (1946, pl. 16) restores roof combs in relatively rare, stepped triangular form.

Decoration. (see Hissink 1934, pp. 57, 102). Southeast facade not exceptional in regard to three-quarter corner columns, moldings, or geometric design in upper wall zone (fig. 81; and see Marquina 1928, foll. p. 66).

Decoration on northwest facade consists of corner columns, same moldings as on southeast facade, fairly realistic mask at north corner, latticelike panels, and miniature houses in upper zone (figs. 79, 80, 82; and see Proskouriakoff 1946, pl. 16). Miniature houses, or temples, portray base molding, doorjambs, and lintel resting on corbels that seem to pertain to stone construction (fig. 83), but roof obviously represents thatch and shows an overlay design suggesting feathers. Inside of niche that portrays interior of house are remains of stucco modeling painted red, blue, and green that seems to have formed the headdress of a seated (?) human (?) figure supported by a stone tenon (ibid.).

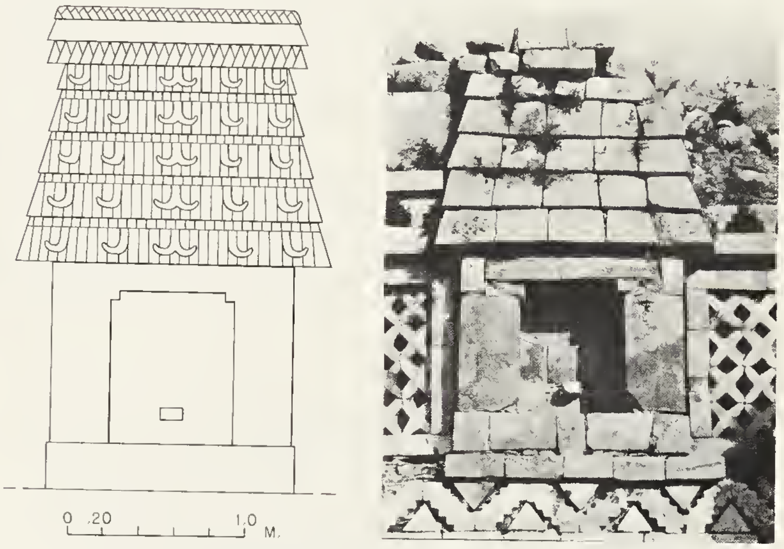


Figure 83. Labna, Structure 11, Southeast Wing. Restored elevation and photograph of miniature temple used as decoration on northwest facade (see figs. 79, 80).

SOUTH WING (Rooms 9–13)

Plan and Section. See figures 3, 84.

Base Molding. Same as Southeast Wing (see above).

Walls. Normal (figs. 85, 87, 88).

Doorways. Normal doorway to Room 9, same as those in Southeast Wing (fig. 85).

Doorway to Room 11 almost entirely buried but carved lintel visible, and E. H. Thompson photograph shows similar element above lintel (fig. 86). Appears to have been secondary construction in front of this doorway that hid earlier carved elements.

Multiple doorway with single column, rectangular capital, and corbels on jambs to Room 12 (fig. 87). Medial molding presumably extended across doorway above lintels, but this not certain.

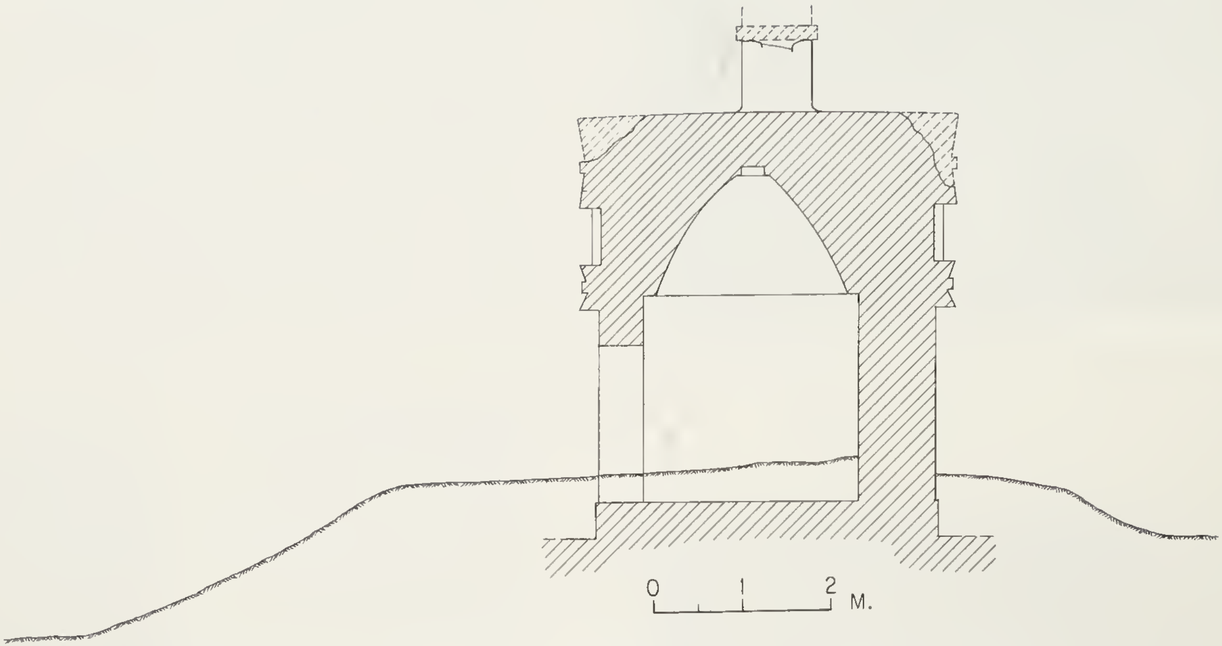


Figure 84. Labna, Structure 11, South Wing. Section through Room 9.

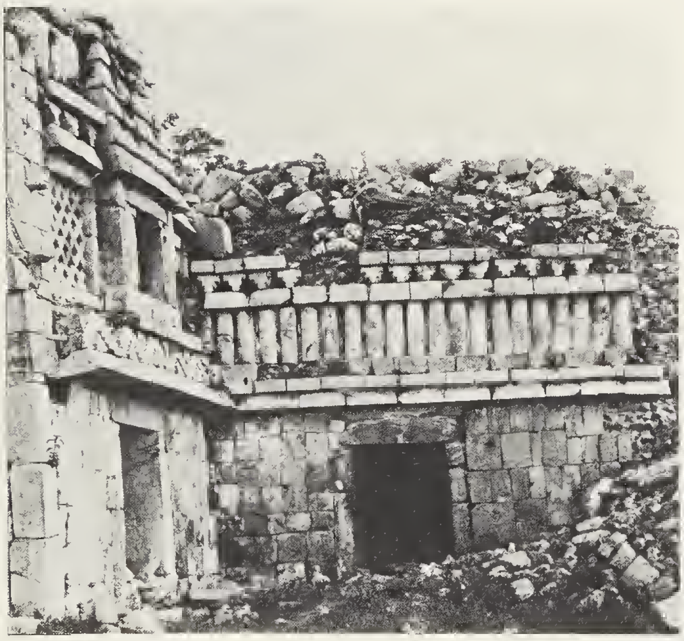


Figure 85. Labna, Structure 11. Juncture of Southeast and South Wings, showing doorways to Rooms 8 and 9, moldings, and facade decoration.

Wall Depressions and Projections. Rod sockets in column capital and eastern corbel of doorway to Room 12. No other wall depressions noted.

Two crudely shaped ring cordholders in Room 12. Each made of flat thin stone with rough hole about .02 m in diameter cut through it. Stone set in wall so that about half of hole protrudes. One cordholder just west of doorway at level of lintel, axis of hole horizontal; other cordholder on western end wall of room at same level, axis of hole vertical. Traces of thin plaster coat on former.

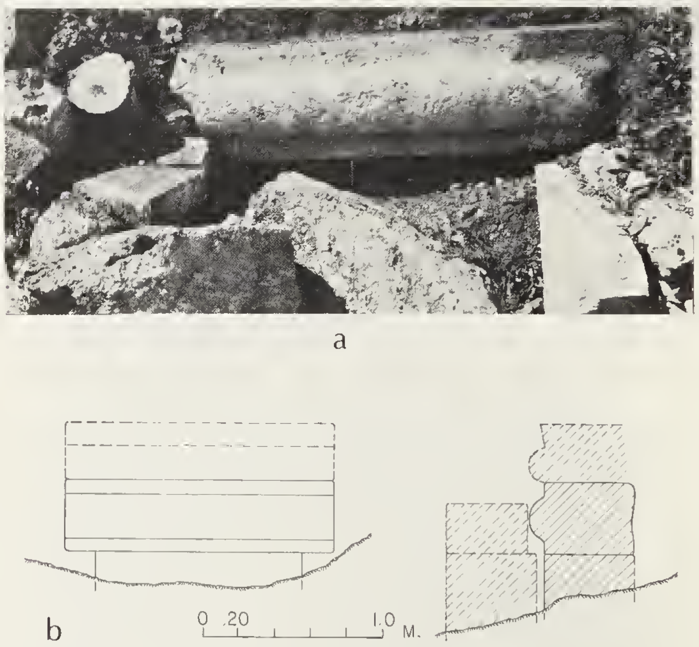


Figure 86. Labna, Structure 11, South Wing. Lintel of doorway to Room 11: a, view from north; b, reconstructed elevation and section, showing carved element (now gone) above lintel, and secondary construction in front (north) of lintel.

Vaults and Beams. Normal (fig. 84).

Moldings. Simple, undecorated three-member medial molding (figs. 84, 85). Primary member of molding on Room 12 has great overhang (.32–.40 m) and tremendous cornerstones (fig. 87b).

Cornice molding on Room 9 same as that on Southeast Wing (figs. 79, 85) and probably same on rest of South Wing.

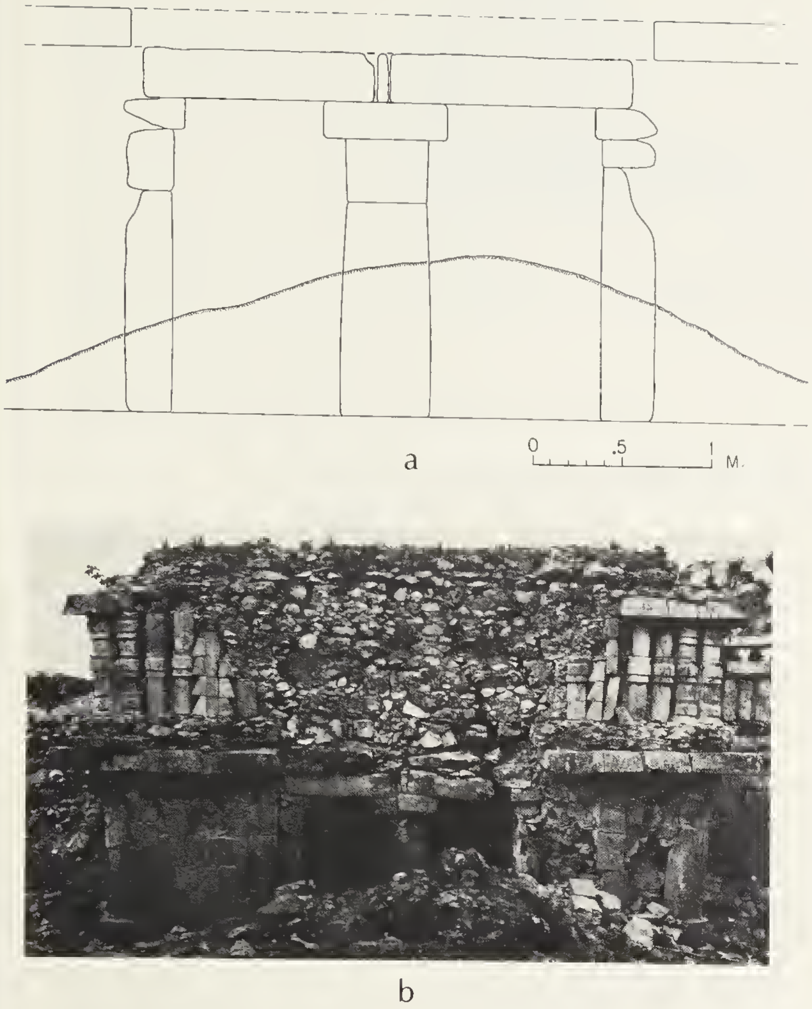


Figure 87. Labna, Structure 11, South Wing. Entrance to Room 12: a, elevation drawing; b, view from south, showing remains of moldings and facade decoration.

Roof. Plaster mark on top of coping stone suggests roof was flush with top of coping course rather than somewhat lower and thus leaving gutter behind coping. This not certain, however.

Roof Structure. Remains of perforated roof comb over Room 9. Built of dressed wall stone, and fairly certainly had small molding (fig. 84), although none of molding still in place. Arrangement of windows almost identical to roof structures on Southeast Wing (see above).

Decoration. Simple split columns in upper wall zone of Room 9 on both front and rear facades (figs. 81, 85).

Decoration on Room 12 (figs. 87b, 88) almost identical to that on southeast facade of Southeast Wing (see Marquina 1928, foll. p. 66), including corner columns in lower wall zone.

Sculpture of grotesque head set in wall in Room 9 (fig. 89).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Some indication that Southeast Wing is secondary to East Wing. This based on deep V-shaped groove in mortar at north end of Southeast Wing. Groove is almost surely mark left by lowest member of cornice molding of East Wing and thus indicates earlier construction of that wing. Doubt arises through uncertainty whether molding ran in some distance and stopped, or continued across south end of East Wing. Cannot be certain of sequence without excavation.

Only other secondary construction apparent is in connection with doorway to Room 11 (see South Wing,

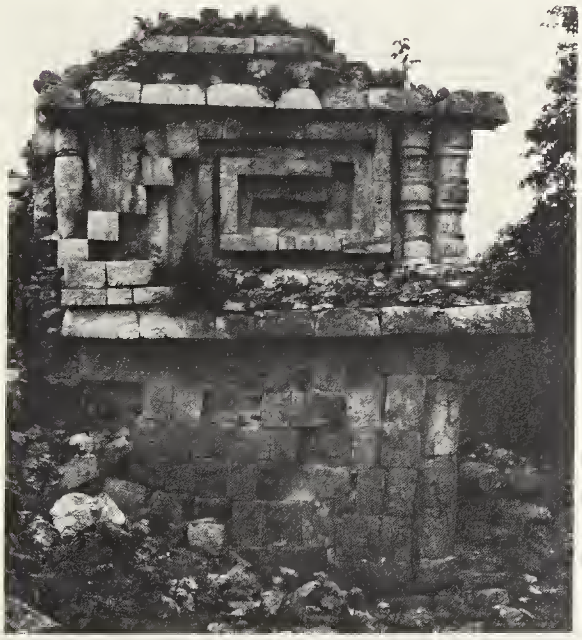


Figure 88. Labna, Structure 11, South Wing. West facade outside Room 12, looking east, and showing three-quarter column at corner, moldings, and upper facade decoration.

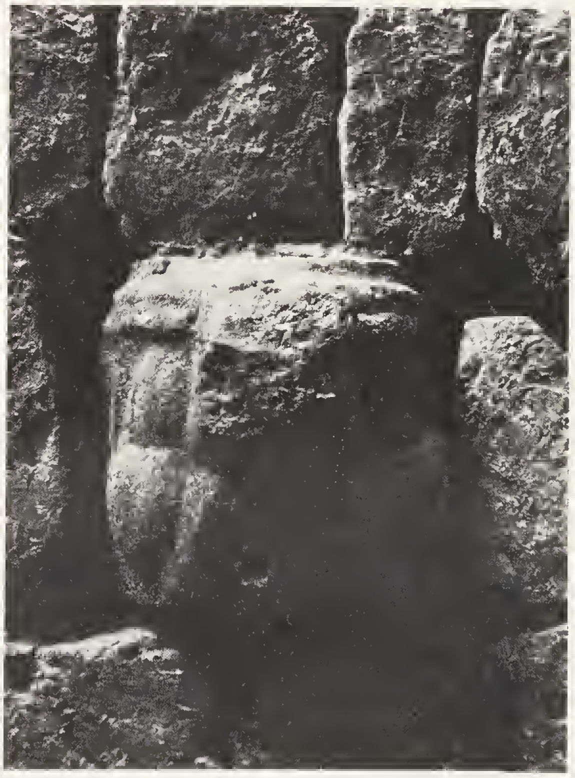


Figure 89. Labna, Structure 11, South Wing. Grotesque head of stone set in wall of Room 9.

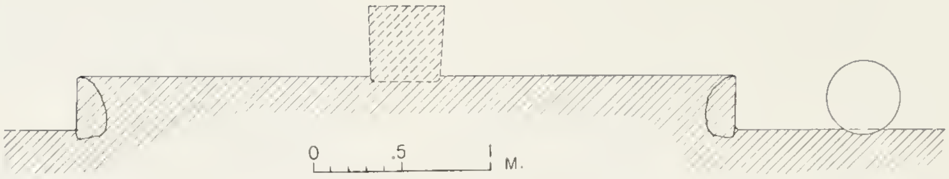


Figure 90. Labna, Structure 12. Section showing Altar 3 at southwest edge of platform, where found, and at center of platform where it may originally have stood.

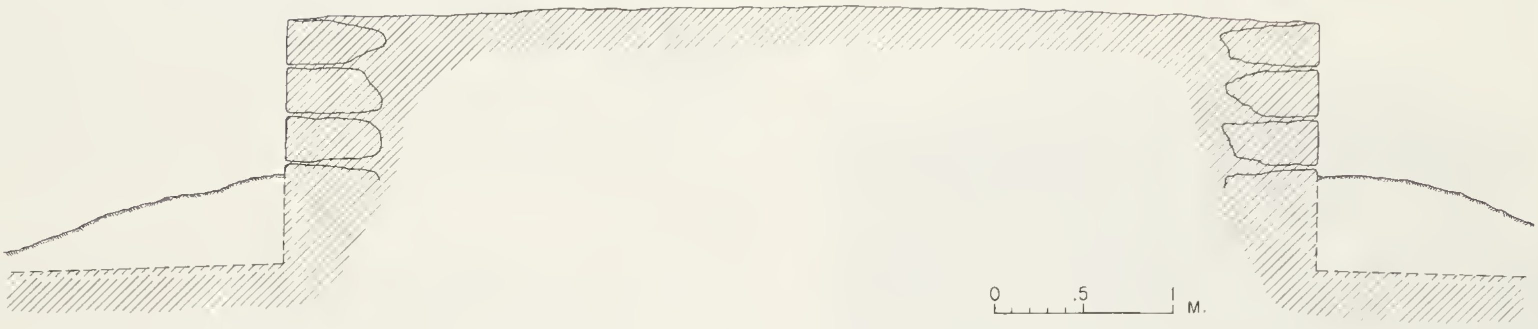


Figure 91. Labna. Section through causeway at point about 6 m north of southern terminus.

above). Suggestion is that Room 10 is secondary to Room 11 and presumably to all of South Wing, but again not certain.

Structure 12

PLAN AND SECTION

See figures 3, 90.

CONSTRUCTION

Similar to Structure 5 (see above) but only one step in height whereas other seems to have been two steps high.

Altar 3 at southwest edge of platform may originally have been at center of structure (see Monuments, below).

CAUSEWAY

(Sacbe)

PLAN AND SECTION

See figures 3, 91. Section through causeway at point about 6 m north of southern terminus.

CONSTRUCTION

Causeway construction similar to that of substructural platforms. Large roughly cut stone forms vertical retaining walls that confine rough-stone fill with layer of smaller stone, possibly laid in mortar, at top (see J. E. S. Thompson, Pollock, Charlot 1932, fig. 60; and Villa 1934, pl. 9a, for ideal sections of causeway). Although no traces left (figs. 4, 63), uppermost surface presumably finished with plaster flooring like that inside buildings and on substructural platforms. Also probable that upper surface carried camber similar to modern roads.

SOUTH GROUP

Small hillside group of two buildings about 700 m southwest of Structure 11 (see fig. 2).

PLAN AND SECTION

See figure 92.

CONSTRUCTION

Platforms forming court and substructures of buildings are in nature of hillside terraces. Main approach to group not clear. Construction normal with vertical retaining walls of 1 m or more depending on slope of hill.

Chultun near southern corner of platform and large cave toward northeast.

Structure S1 sits on platform or terrace about 2 m above platform of Structure S2. Elevation of Structure S1 is caused by rise of hillside, and at west corner building rests on bedrock.

E. H. Thompson (n.d.a, pp. 22–23) seems to believe that two buildings are unfinished units of what was finally to be a single structure. Both buildings are unfinished (see Strs. S1, S2, Secondary Construction . . . , below), but no reason to believe two were to be joined into single structure. Shape of substructural terraces and contour of hillside, difference in elevation of buildings, completed northeastern end of Structure S1, and differences in decoration suggest that buildings were to remain separate even after enlargements.

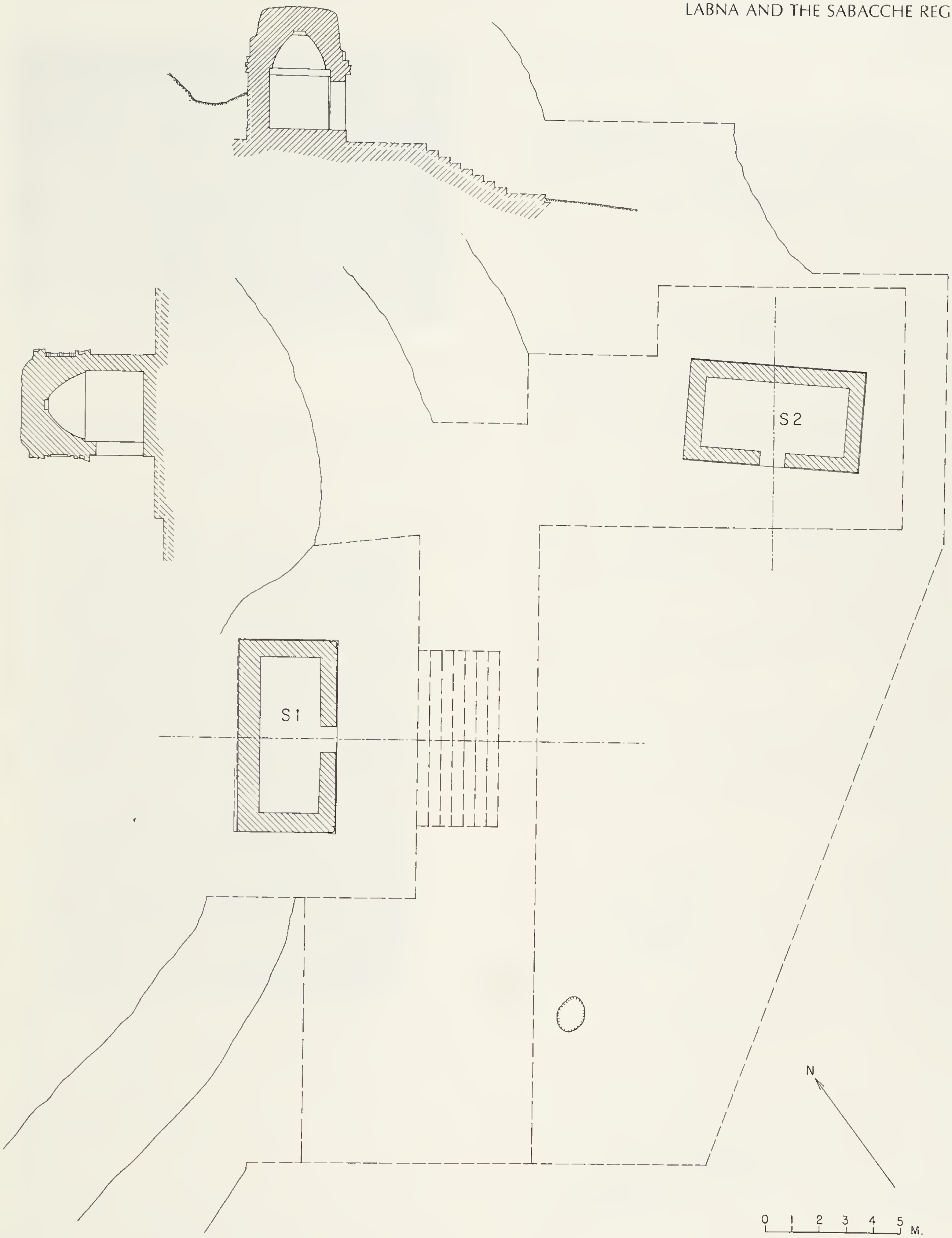


Figure 92. Labna, South Group. Plan of group and sections through Structures S1 and S2.

Structure S1

SUBSTRUCTURE

Stairway. Ruined stairway of undetermined treads and risers leads from court to building (fig. 92). Some indication risers averaged .21–.22 m.

Construction. See South Group, above.

SUPERSTRUCTURE

(fig. 93)

Plan and Section. See figure 92.

Base Molding. Single plain course of dressed stone (fig. 94). Bedrock beneath building forces rise in base molding at rear near west corner, where molding also changes proportions (fig. 95). No base molding across southwest end of building because of bedrock and unfinished character of that end (see Secondary Construction . . . , below).

Floor. Small fragment of cream-colored floor observed.

Walls. Recessed course of inner wall immediately below spring of vault more pronounced than usual. Recession disappears at doorway owing to usual thinning of walls at doorjambs (fig. 94).

No outer-wall facing at southwest end of building (fig. 95; and see Secondary Construction . . . , below).

Doorway. Normal except unusual decoration (fig. 94).

Wall Depressions. Usual cordholders inside room and rod sockets in doorjambs.

Vaults and Beams. In all respects normal.

Moldings. Three-member medial molding with decorated middle member at front of building (figs. 93, 94). Plain three-member medial molding at rear.

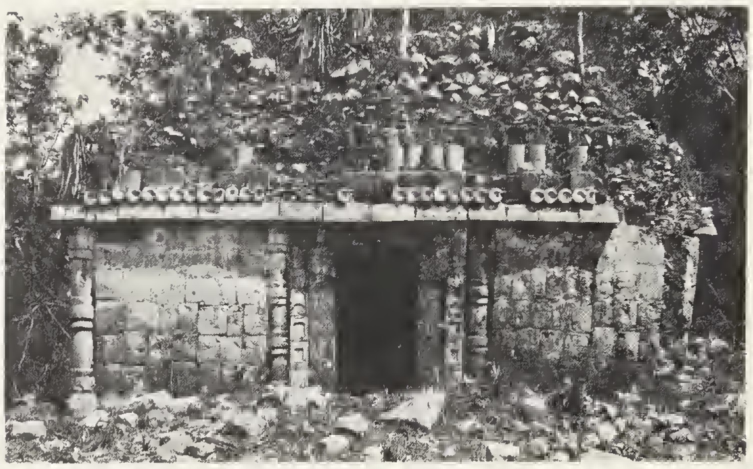


Figure 93. Labna, Structure S1. Front of building, looking northwest.

Cornice molding entirely fallen.

Decoration. Unusual decoration at each side of doorway (figs. 94, 96). Lower-facade columns with spools; upper-facade columns probably had spools but none still in position (fig. 93).

Fragments of wall painting in black line inside room.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Interesting example of partially completed building. Obvious that addition was planned at southwest end. This shown by unfinished end wall that has no base molding, no medial molding, and no dressed wall stone at ends of longitudinal walls where hearting is showing (fig. 95). Addition of another room would have left only area that now carries dressed wall stone showing as end of new room.

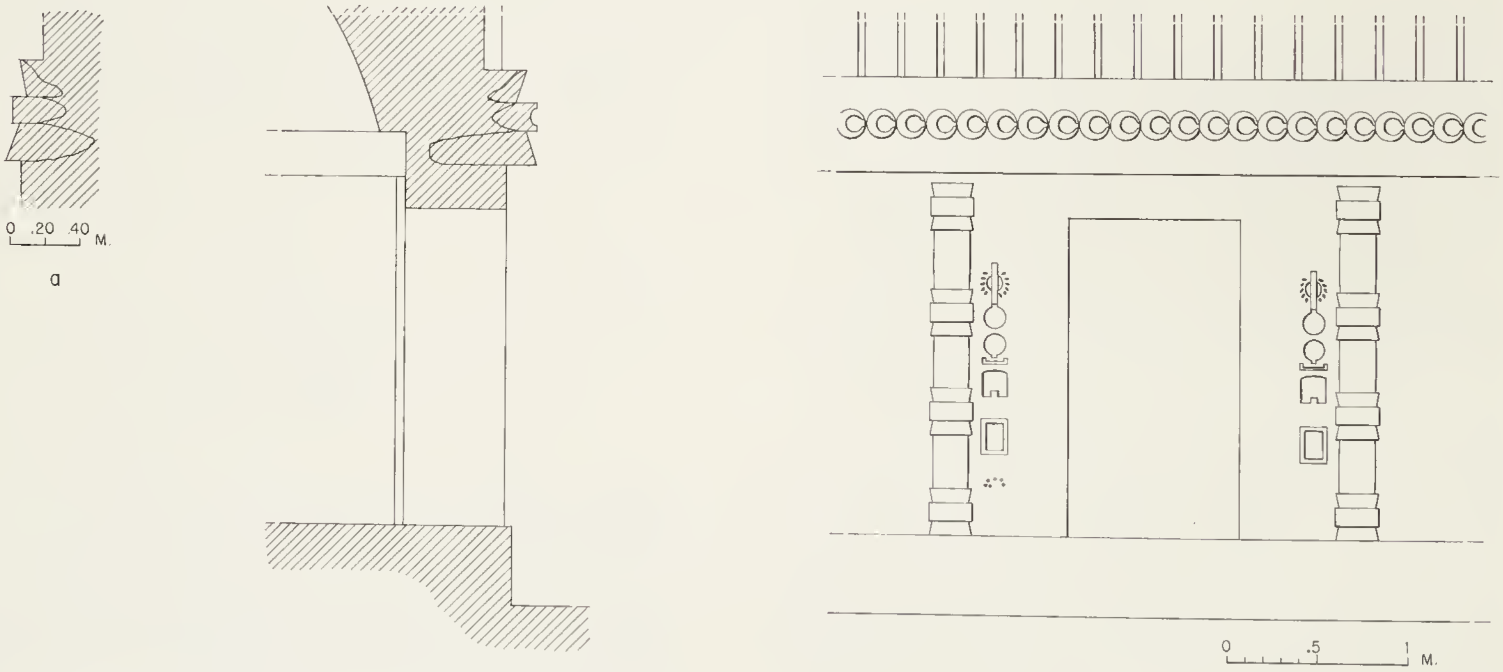


Figure 94. Labna, Structure S1. Section and elevation of entrance, showing decoration each side of doorway, medial molding, and split columns on upper facade: a, section of medial molding at rear of building.

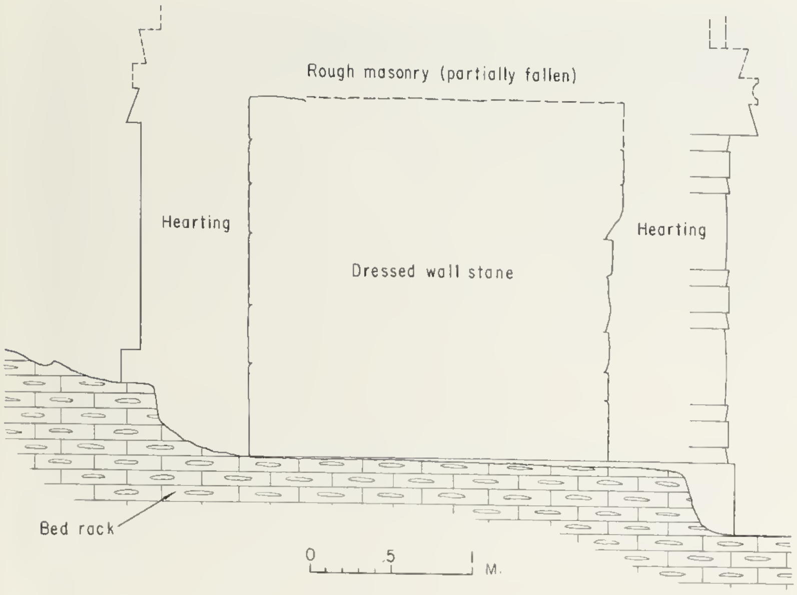


Figure 95. Labna, Structure S1. Section through bedrock foundation and elevation of unfinished southwest end of building (cf. fig. 99).

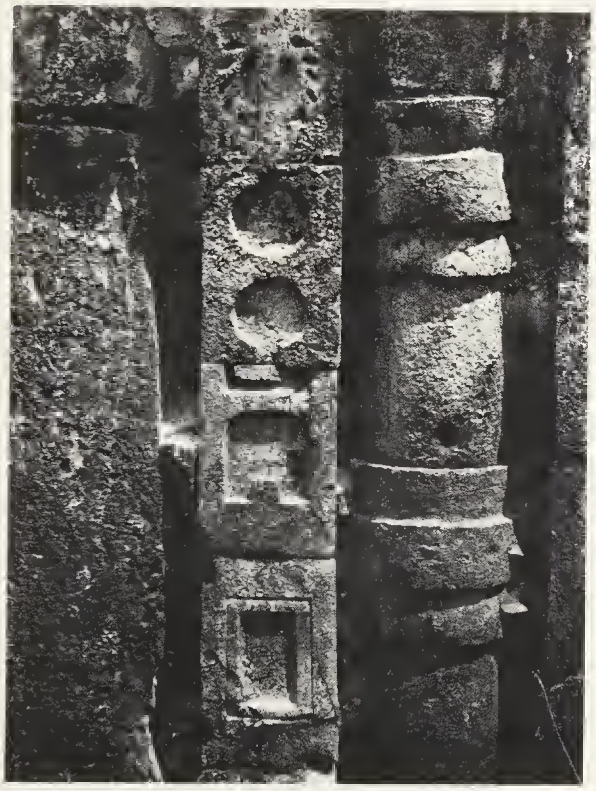


Figure 96. Labna, Structure S1. Carving at right of doorway (see fig. 94).

Structure S2

SUBSTRUCTURE

Construction. Low platform one step high, formed by single course of dressed stone (fig. 92). Same platform extends across northwest side of court and there supports stairway to Structure S1.

SUPERSTRUCTURE

Plan. See figure 92.

Section. See figure 97.

Elevation. See figure 98. Partially restored.

Base Molding. Single, plain, rather high course of well cut and dressed stone (figs. 97–100).

Walls. Normal but for unfinished northwest end wall (see fig. 99; and Secondary Construction . . . , below). Two reused stones suggestive of doorway decoration on Structure S1 (see above).

Doorway. Normal, but may have carried decoration similar to that at each side of doorway of Structure S1 (see above). Facing stone at sides of jambs now fallen.

Wall Depressions. Usual cordholders inside room and rod sockets in doorjambs.

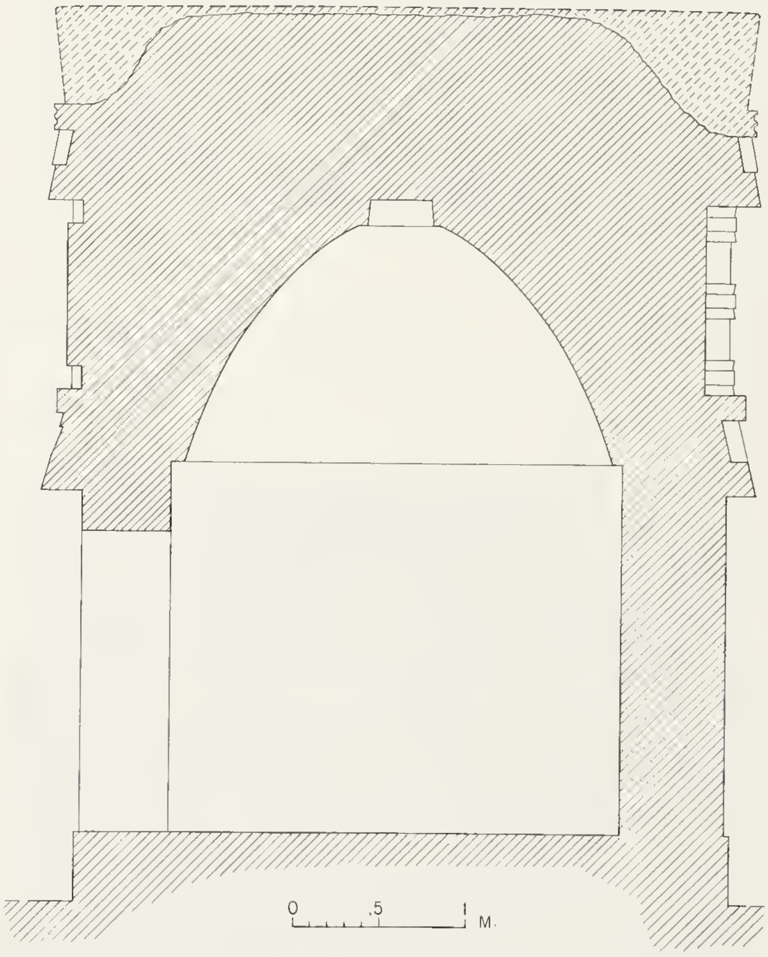


Figure 97. Labna, Structure S2. Section through center of building.

May be cordholder of two-hole variety (see fig. 62, left) in vault stone near top of vault, but this not certain.

Vaults and Beams. Normal (see fig. 97).

Moldings. Medial molding has alternative spool and fret designs in middle member at front of building (figs. 98, 99) and continuous row of colonnettes at rear (figs. 97, 100).

Cornice molding at front of building carries row of colonnettes in second member with small decorated band

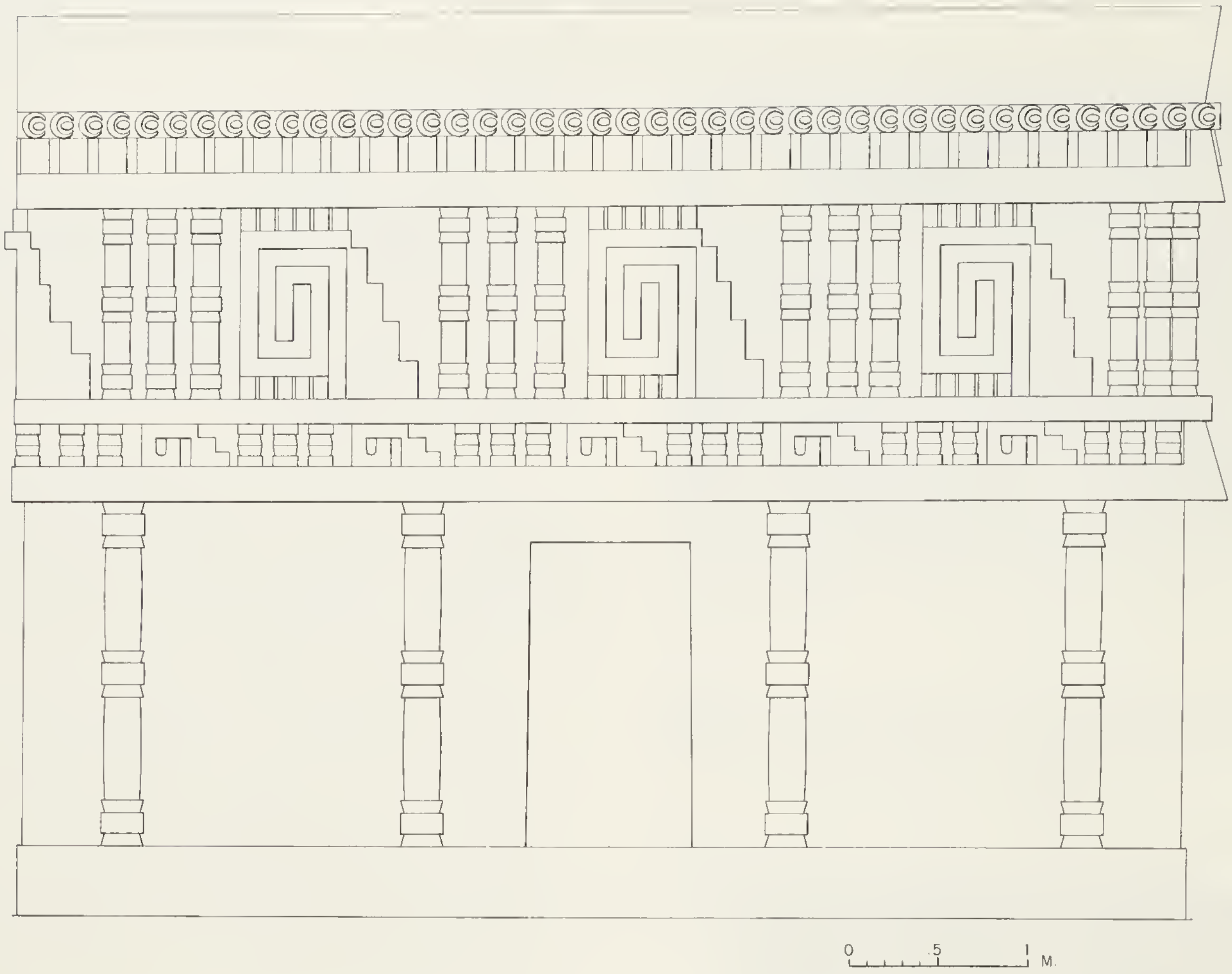


Figure 98. Labna, Structure S2. Elevation of principal facade, partly restored.

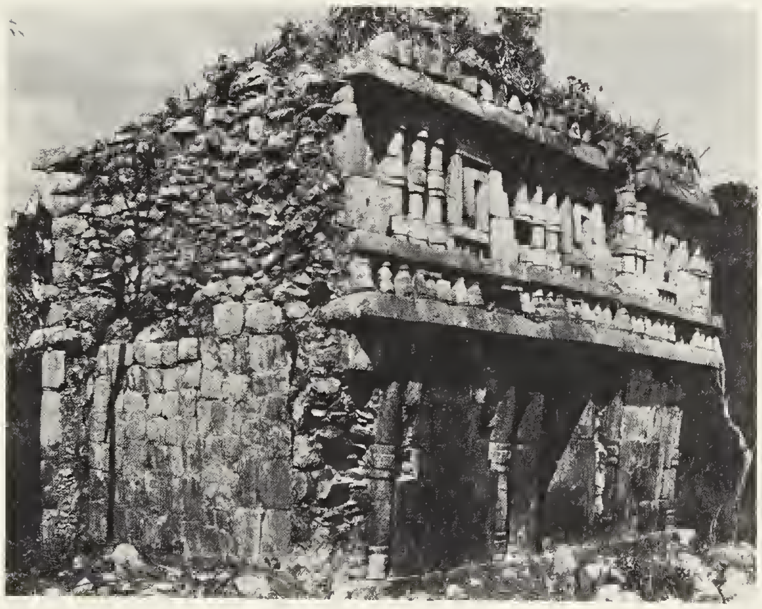


Figure 99. Labna, Structure S2. View of building from west, showing unfinished northwest end and decoration on front of building.

above. Only two lower members remain at rear but molding was probably same as at front.

Roof. Small amount of final plaster surface preserved.

Decoration. Split columns and spools in lower wall zone at front of building (figs. 98, 99); split columns and spools alternating with fret design in upper wall zone.

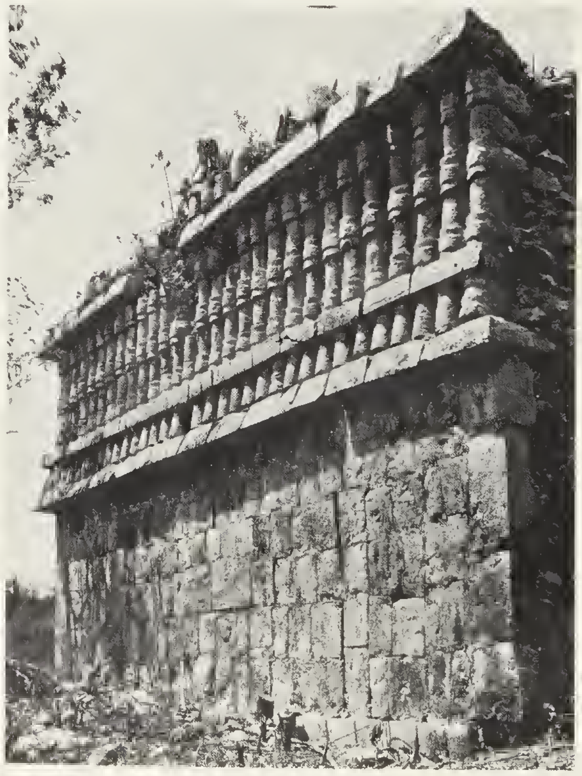


Figure 100. Labna, Structure S2. View of rear of building, looking south.

Lower wall zone at rear of building is plain; upper zone carries continuous stretch of split columns and spools (figs. 97, 100).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Northwestern end of building was left unfinished in same manner as southwest end of Structure S1 (see fig. 95). Area between front and rear walls to level of spring of vault is all that is faced with cut stone (fig. 99). Ends of walls and upper zone, or end of vault, show hearting of masonry, and moldings do not extend across this end of building. Obvious that addition was planned as with Structure S1.

MISCELLANEOUS SCULPTURE

M1. Stone phallus (fig. 101a) .90 m long. Located southeast of Structure 9 (see figs. 3, 64) and not associated with any building. E. H. Thompson (1889a, p. 92) reports two phalli and two stelae at this location. Other phallus not seen, and no stelae, unless Altar 4 was considered stela by Thompson.

M2–7. Carved building stones located about 50 m northwest of Structure 13 (see fig. 3). Stones found and apparently removed from loose stone wall by E. H. Thompson (1889a, pp. 70–72, 75–76).

M2. Human figure (fig. 101b; and see Proskouriakoff 1950, fig. 93h). Maximum length of stone 1.05 m. See Proskouriakoff 1950, p. 169, for further comment.

M3–4. Human figures (ibid., fig. 93f, g). Maximum length of M3 is .66 m; maximum length of M4 is .90 m. Stones apparently fitted together, M3 above M4. See Proskouriakoff 1950, p. 169, for comment.

M5. Birds with linked necks on one side of stone, hieroglyphs on other side (fig. 101c). Maximum length of stone .49 m. Possibly corbel from jamb of doorway.

M6. Animals (squirrels or kinkajous ?) with linked tails on one side of stone, hieroglyphs on other side (fig. 101d). Maximum length of stone .77 m. Possibly capital from columnar doorway.

M7. Carved cornerstone (fig. 101e). Dimensions not recorded.

MONUMENTS

STELA

Stela 1. Plain (fig. 102a). Maximum length 2.20 m, maximum thickness .30 m.

Located about 100 m northeast of South Group (see fig. 2). Rests on edge of low platform in pass through hills that goes by South Group.

Stela badly weathered and broken. Shape of monument and association with isolated platform (cf. stelae at Sayil and Uxmal) suggest that stone is a stela, but might be building stone abandoned in transit from quarry. No other stones of monumental character noticed here.

ALTARS

Only four altars were observed and recorded at Labna, an unusually small number for a site of this size. One of the altars is carved; three are plain. Two are of the drum variety; two are column altars (see Sayil, Altars, for definition of *drum* and *column*.

Altar 1. Carved (fig. 102b; and see Proskouriakoff 1950, fig. 93e). Diameter at top .63 m.

At eastern edge of Structure 5 (see figs. 64, 72). Resting on side with upper surface to south. Altar may originally have been at center of Structure 5 (but see below).

Typical drum-shaped altar fairly common in Puuc region but unusual in sculpture and hieroglyphs. Weathered carving on side of altar shows remains of five figures beneath band of hieroglyphs at upper edge. Carving occupies about three-quarters of circumference of stone, remaining quarter being dressed but uncarved. Glyphs illegible. Top of altar dressed but plain. See Proskouriakoff 1950, p. 169, for further comment.

E. H. Thompson (1889a, pp. 117–119) mentions low stone pillar about 2 feet in diameter by 2 feet high at eastern edge of circle before Structure 4. Seems to be Altar 1, but no carving mentioned and his sketch looks nothing like this altar. He also states he believes stone to be in place and never at center of Structure 5.

Altar 2. Plain (fig. 102c). Height 1.43 m.

Lying at edge of debris at foot of stairway of Structure 4 and centered on building (see fig. 64). Resting on side with top to west. Presumably originally stood erect at center of foot of stairway.

Typical plain column altar, sometimes referred to as *picote.* Well cut and dressed, flat on top, and usual taper toward bottom.

Altar 3. Plain (fig. 102d). Diameter at top .43 m.

At southwest edge of Structure 12 (see fig. 3). Resting on side with top to west. May originally have been at center of Structure 12, as restored in figure 90, but by no means certain.

Plain well-cut and dressed drum altar of conventional design but better shaped at bottom than many instances.

Altar 4. Weathered stone that appears to have been column altar similar to Altar 2 (see above).

Located southeast of Structure 9 near stone phallus (Miscellaneous Sculpture, M1; see above).

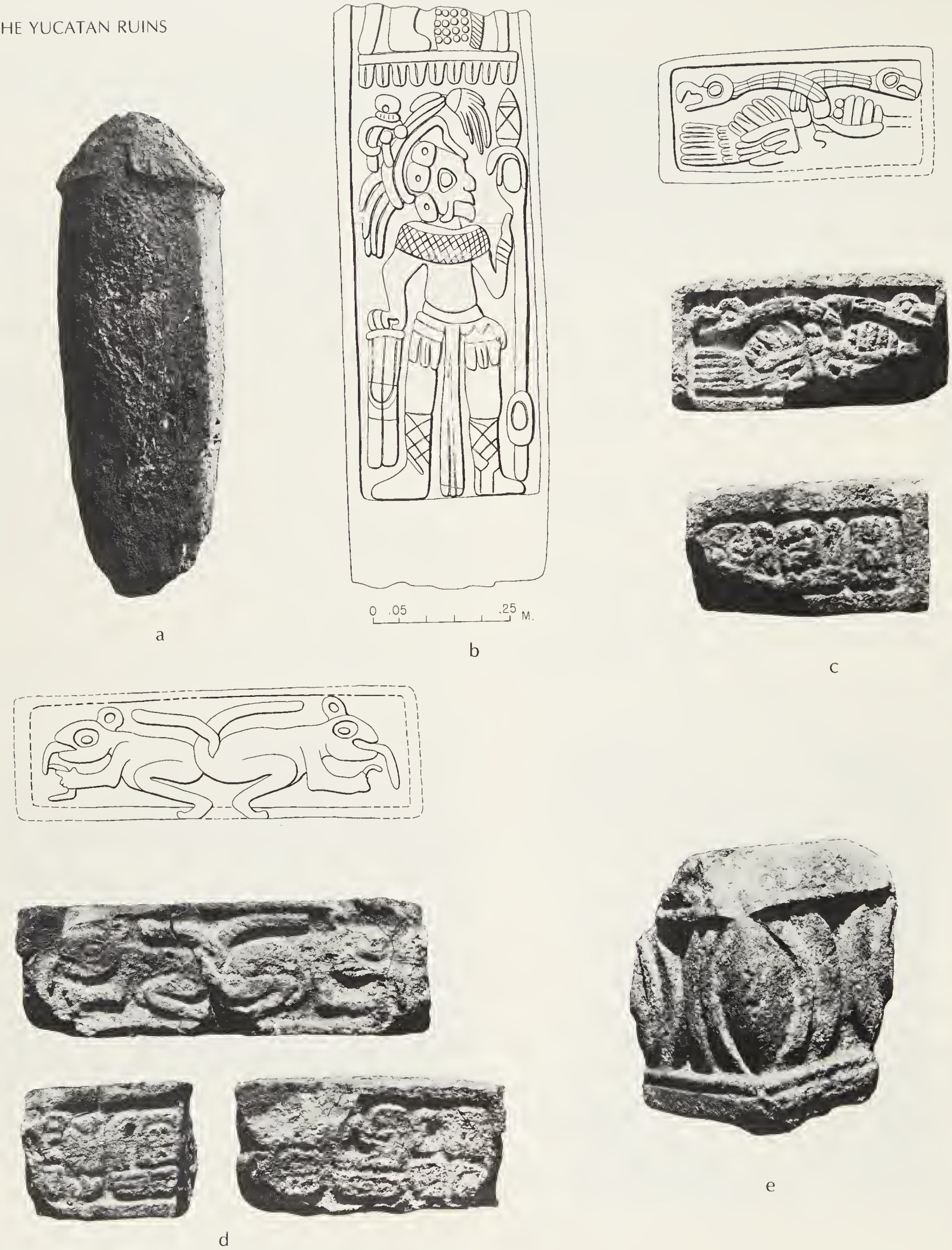


Figure 101. Labna. Miscellaneous sculpture: a, M1, stone phallus (scale 1:10); b, M2, bas-relief of human figure with spear; c, M5, stone with bas-relief of birds on one side and hieroglyphs on other; d, M6, stone with bas-relief of animals on one side and hieroglyphs on other; e, M7, carved cornerstone.

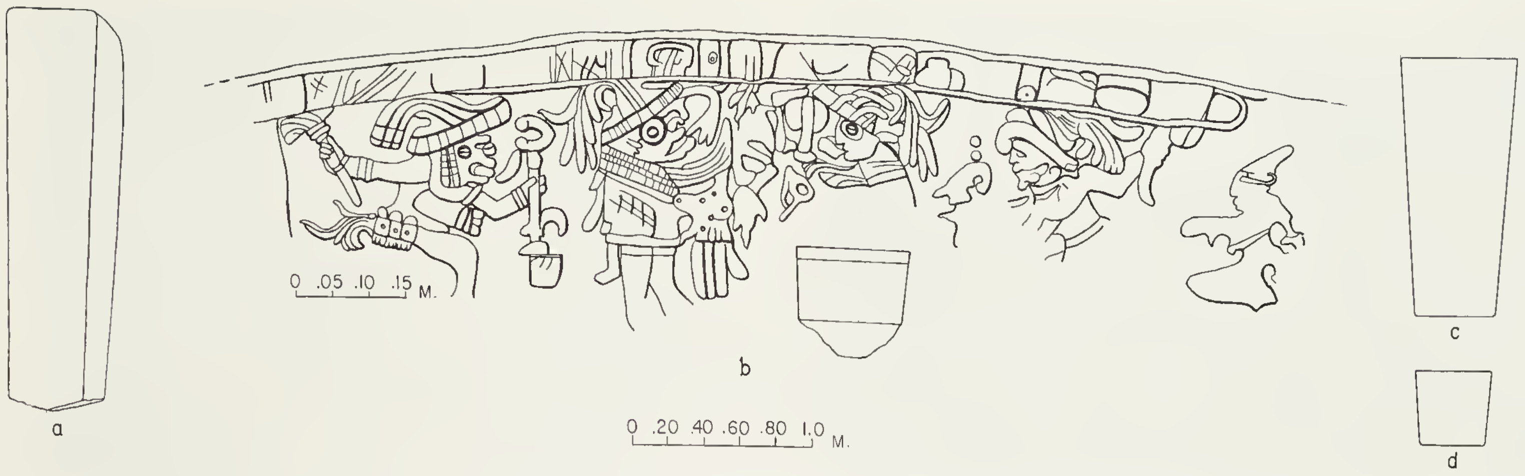


Figure 102. Labna. Monuments: a, Stela 1; b, Altar 1, bas-relief carving on circumference, and profile of altar; c, Altar 2, profile; d, Altar 3, profile.

Chuncatzim

ETYMOLOGY

E. H. Thompson (1888, p. 384) says the name means "By the trunk of the great Catdzin tree." *chun,* foot, root, or trunk (see Martinez 1929, p. 319); *catzim,* acacia tree (*Prosopis chilensis;* see Roys 1931, p. 224). Best translated: at the place of the catzim tree (see Roys 1935, pp. 9–10). Variant spelling: Chúncatsin, Chunkatzin, Chun-Cat-Dzin, Chun-Kat-Dzin. Other name: Labna.

SITUATION

Approximately 2.5 km south of ranch of Sabacche and 1.5 km north of Labna (see fig. 2).

TOPOGRAPHY

Known part of site rests on low hill that forms island in small valley (see Size, below).

WATER SUPPLY

See Labna and Sabacche, Presence of chultuns not certain, but almost surely there.

SIZE

What is assumed to be principal group of site covers area about 40 m square. Mound short distance to northeast was only other construction observed.

E. H. Thompson (1888, pp. 383–385; 1889b, pp. 164–166) reports region covered with mounds, heaps of carved stones, standing building about half mile to northwest, and implies presence of other structures.

CIVIC PLAN

Area surrounding ruins described here was not explored (but see Size, above). For the present site must be thought of as small, isolated, civic and religious center serving the little valley it overlooks from its hilltop location.

Question whether Chuncatzim should be treated as part of larger site of Labna. As terrain between the two is unexplored, and as most writers have treated Chuncatzim as separate site, seems better to continue to do so.

Orientation. Group faces 25° east of north.

REFERENCE

Blom 1935 (Labna).

COURT OF STRUCTURE 1

PLAN AND SECTION

See figure 103.

CONSTRUCTION

Platform supporting group rests on top of hill. Retaining walls badly fallen, but enough remains to show they were stepped or terraced, with slight batter wherever natural slope of land demanded wall too high to be built easily in one rise. At west two terraces visible with total height of 2.5 m or higher (fig. 104). Southeast corner in fair condition and shows two terraces, each somewhat higher than those at west. At north, or front, of platform, slope of hill more gradual and only one terrace roughly 1.5 m high occurs here. Construction of platform normal with retaining walls of roughly cut stone and core of loose stone fill.

Approach to court clearly from north, where there is stairway of normal treads and risers.

Several caves in platform that probably represent fallen chultuns. Located at north, east, and southwest (only north one shown in fig. 103).

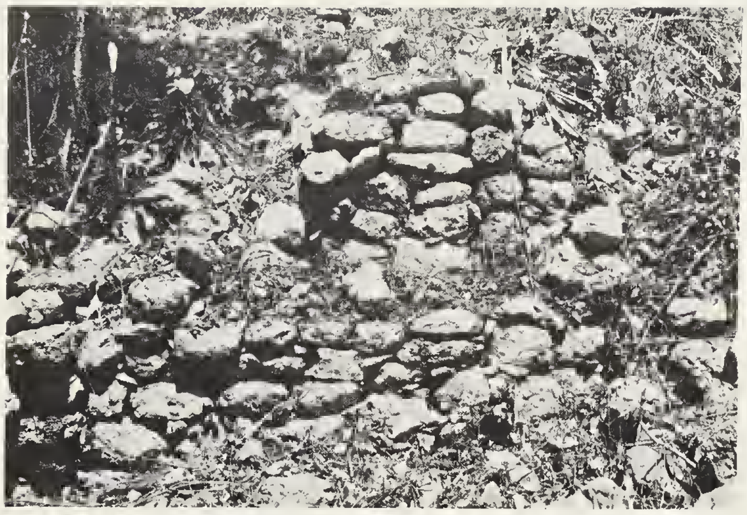


Figure 104. Chuncatzim, Court of Structure 1. Terraces on western side of main platform, looking east.

Structure 1

(Palace Temple, Casa 2, Monjas, Canel Cruz)

PLAN, SECTION, AND ELEVATION

See figures 103, 105, 106.

SUBSTRUCTURE

Stairway. Building approached from north by fine stairway with broad treads and normal risers (cf. Labna, Str. 1, Substructure, Stairways, item 3). Treads carry gentle slope downward from back to front.

Construction. Low terrace rises vertically from court level but coincides with main platform walls at rear. Normal construction. Marked slope from edge of terrace up to building.

SUPERSTRUCTURE

(fig. 107)

Plan. See figures 103, 106.

Sections. See figures 105a, 106.

Elevation. See figure 105b. Restored.

Base Moldings. Plain, single course of well-faced stone on lower and upper stories but with different proportions (fig. 105). Corners of lower-story molding slightly rounded, upper story rectangular.

Stairway. Stairway to second story built over half-vault and passage to allow access to Room 2 (fig. 105). Inner ends of capstones of half-vault rest on top member of medial molding, and stairway rests against upper wall-zone decoration and cornice molding of lower story (fig. 108).

Treads and risers of stairway entirely fallen or covered, but plaster marks indicate riser of .21–.22 m. Should top step have been separate course of stone, rather than upper part of coping course, each tread would be about .01 m narrower and stairway slightly steeper.

Floor. Good deal of floor left in various rooms. Pure white or light brown to tan in color. Excellent quality of hard polished floor.

Rise in floor level of rear room (Room 12) of upper story (fig. 105a).

Walls. Thickness at doorjambs runs .50–.61 m. Interior walls of lower story up to 1.65 m thick.

Wall stone normal in shape and finish, outer facing well dressed (figs. 107, 108), inner facing only roughly dressed (fig. 109).

Doorways. Normal with stone lintels and each jamb stone running full width of wall (fig. 110). Jambs of doorway beneath stairway are single stones; remaining jambs of two or more stones. Doorways run from .83 to 1.45 m (Room 2) wide and tend to narrow at top.

Wall Depressions and Projections. All varieties of cordholders, viz. tongue-at-corner, tongue-at-side, hole-at-edge, hole-in-center (figs. 62, 136e, 146a, c). One example of cordholder at end of vault, all others beside doorjambs inside rooms.

Usual hemispheroid rod sockets in doorjambs.

Fragment of wall projection just east of jamb and just below level of lintel in Room 2. May have been ring but only stub remains.

Benches. Bench 1.05 m deep, .28 m high at either end of Room 2 (figs. 103, 105a). Front of each bench single course of well-cut stone (fig. 109). Tops of benches heavily plastered. Plaster shows black when scraped. Burn or stain (?).

Vaults and Beams. Normal vaulting with arched soffit slopes (figs. 105a, 109), small offset beneath capstones, deeply tailed in spring course immediately above primary member of medial molding (figs. 111a, 112), mixture of semispecialized and nonspecialized vault stone. Capstone span varies greatly (.20–.60 m) between rooms.

Upper-story vault faces slightly less curved owing to narrow rooms. Spring of vaults in Rooms 11 and 12 at same level although floor level and level of lintel rises in Room 12 (fig. 105a).

Color of plaster on vaults, white, cream, brown, and black, same as on walls. Black may be from smoke (?). Only primary coat plus one finished coat of plaster in contrast to multiple coats sometimes seen.

Backing of vault, behind upper-facade masonry and cornice molding, is faced with carefully laid masonry that apparently carried rough coat of plaster (fig. 113b). Backing rises in two nearly vertical steps (fig. 111a), the lower step footed on primary member of medial molding, with tails of stones of lowest member of cornice molding resting

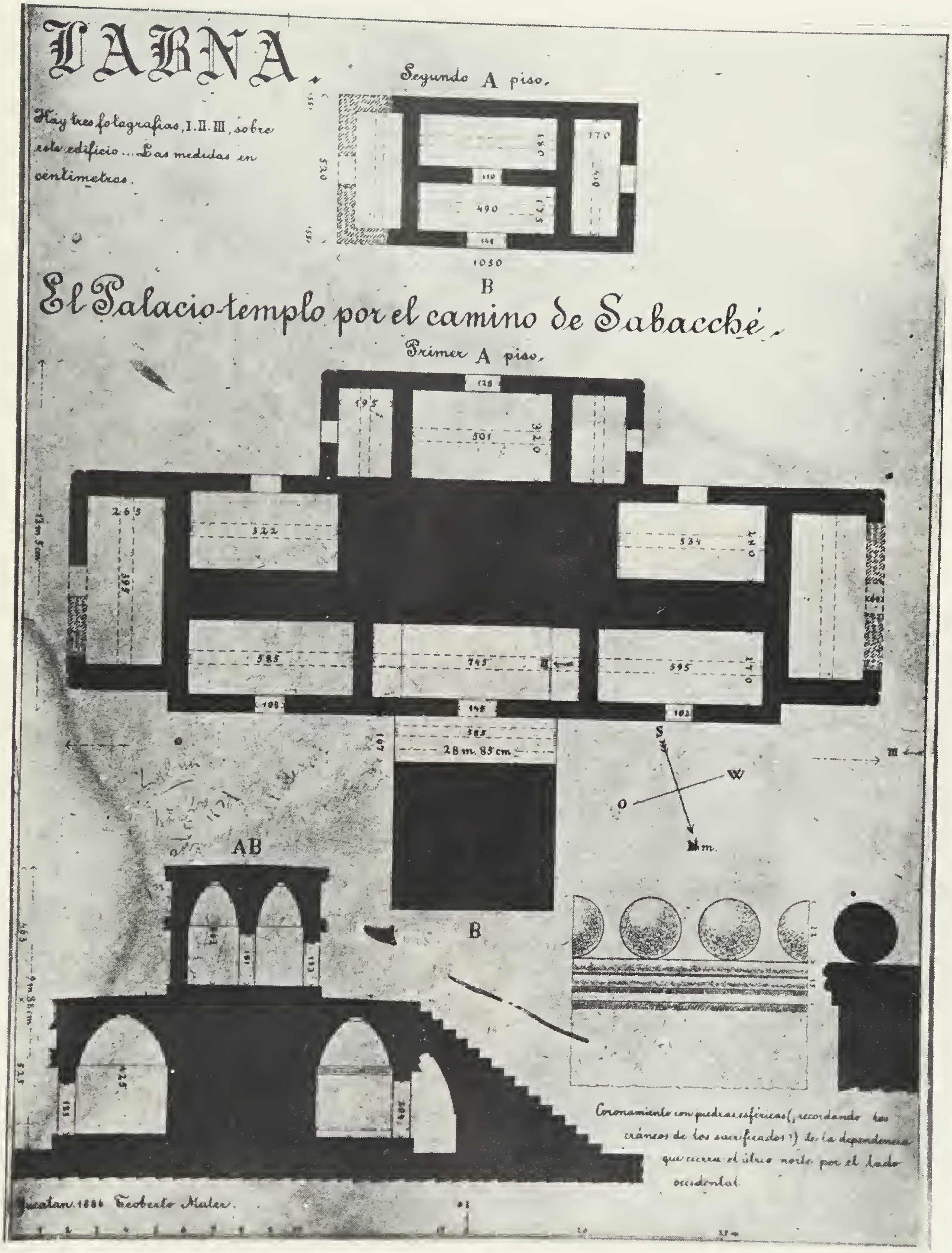

LABNA.
Hay tres fotografias, I. II. III, sobre este edificio ... Las medidas en centimetros.
Segundo A piso.
170
410
110
490
175
1050
520
B
El Palacio-templo por el camino de Sabacché.
Primer A piso.
128
195
501
320
265
522
534
585
745
595
108
148
103
385
28 m. 85 cm.
S
W
O
M
AB
B
9 m. 38 cm.
Coronamiento con piedras esféricas (¿recordando los cráneos de los sacrificados?) de la dependencia que cierra el átrio norte por el lado occidental
Yucatan 1886 Teoberto Maler.

Figure 106. Chuncatzim (labeled Labna). Maler plan and section of Structure 1 and detail of decoration on Structure 2. Description of detail reads: "Top ornament of spherical stones (recalling the skulls of sacrificial victims?) of the subsidiary building that encloses the north terrace on the west side."

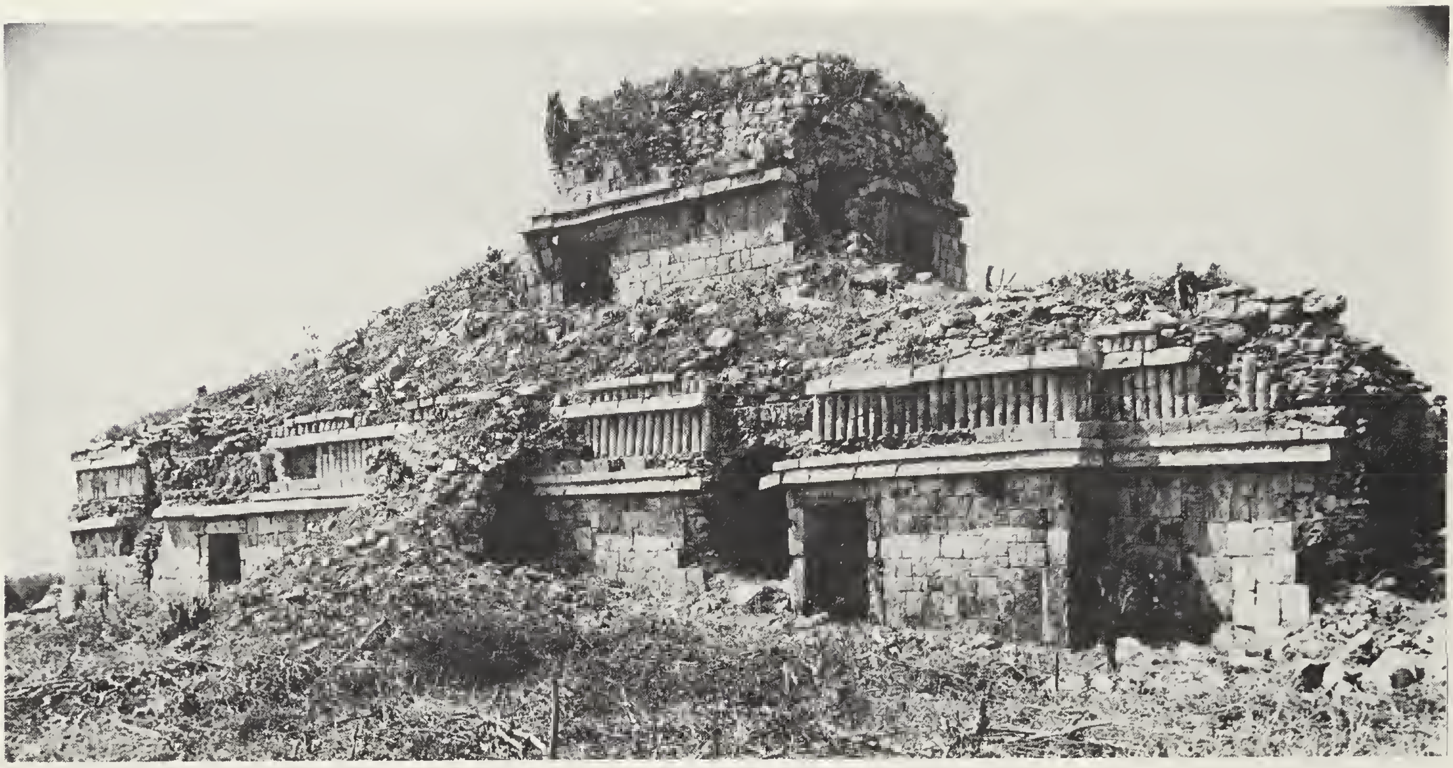


Figure 107. Chuncatzim, Structure 1, looking south.

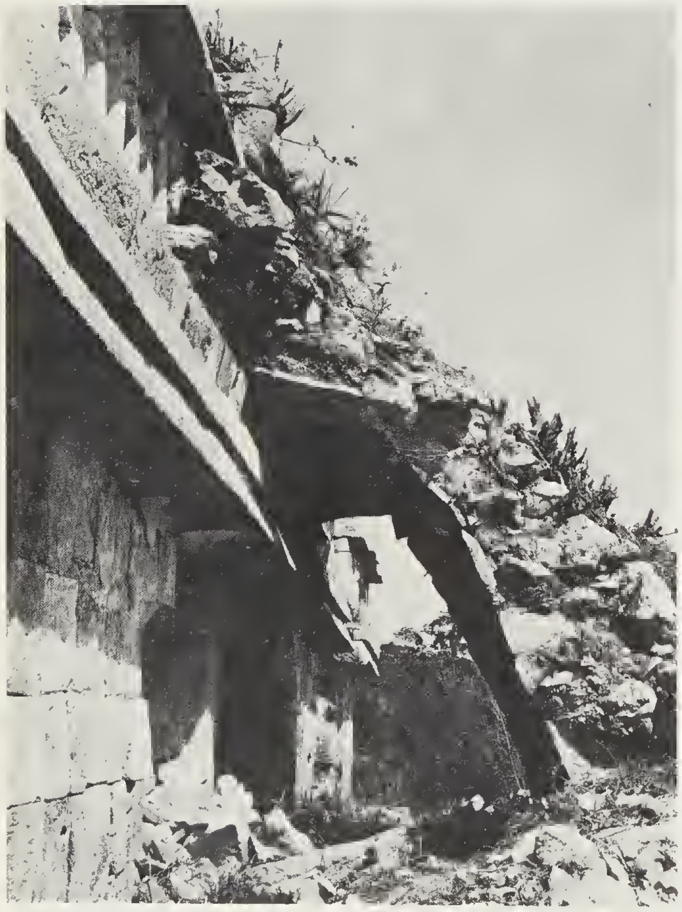


Figure 108. Chuncatzim, Structure 1. Half-vault over passageway beneath stairway to second story, looking west, and showing masonry of stairway laid against split columns in upper facade.

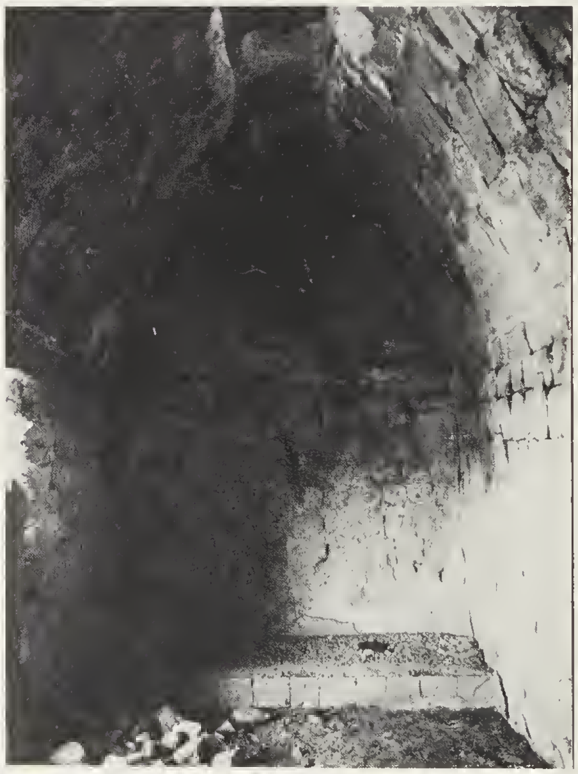


Figure 109. Chuncatzim, Structure 1. East end of Room 2, showing wall and vault masonry and low bench across end of room.

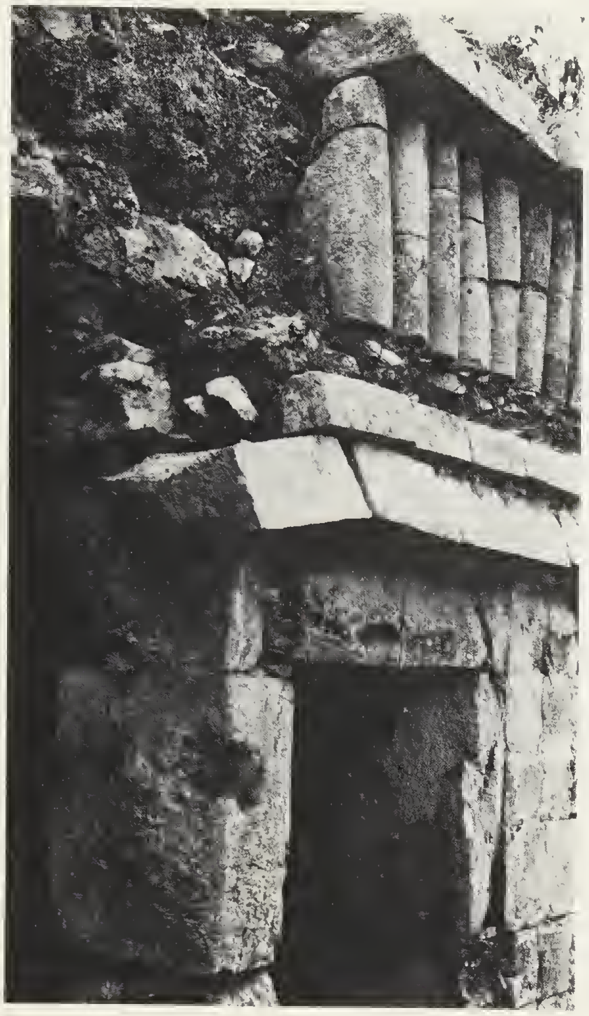


Figure 110. Chuncatzim, Structure 1. Doorway of Room 3, looking west, and showing full-width jamb stones, stone lintel, and split columns in upper facade.

on top of this step. Same sequence of lower wall, vault, upper facade and roof construction as seen elsewhere (e.g., Sabacche, Str. 5, fig. 147a).

Considerable variation in location of vault beams. Beam holes appear immediately above and below spring level, at two- thirds height of vault, in course below small offset beneath capstones, and in small offset. Room 12 had no main beams at spring level.

Moldings. Normal classic Puuc forms (figs. 105, 111a, c, 113b). Huge cornerstone, .77 m on a side, in primary member of medial molding of lower story (fig. 111b).

Cornice molding of upper story fallen and restored in elevation (fig. 105a).

Roof. Traces of plaster surface on roof of upper story. None visible on lower story.

Decoration. Typical corner facade columns with round bases and capitals on lower story (fig. 113). Bases, column drums, and capitals have slight tenons at rear. Columns must have existed once at northeast and northwest corners although now fallen.

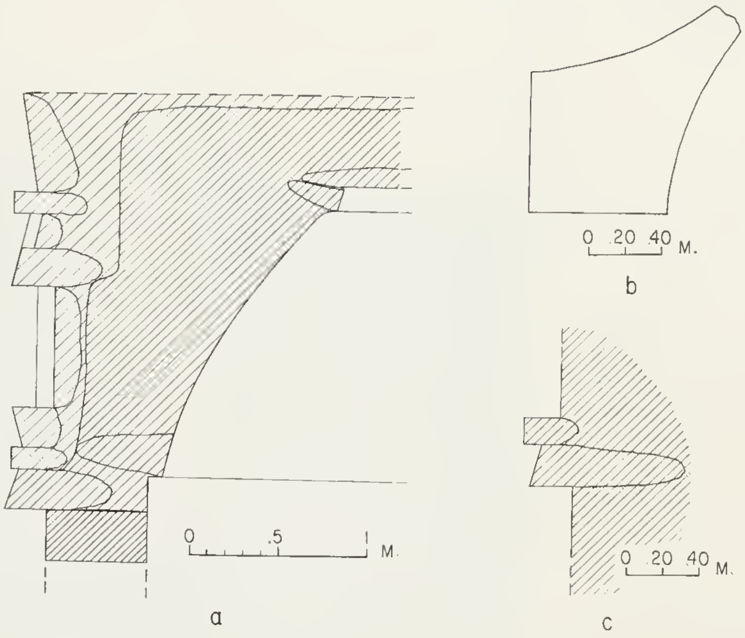


Figure 111. Chuncatzim, Structure 1: a, section through door lintel, upper facade, and front half of vault, showing construction of moldings and lack of bonding between upper facade and vault masonry (cf. fig. 147); b, plan of cornerstone from primary member of medial molding of lower story; c, section of medial molding of upper story.

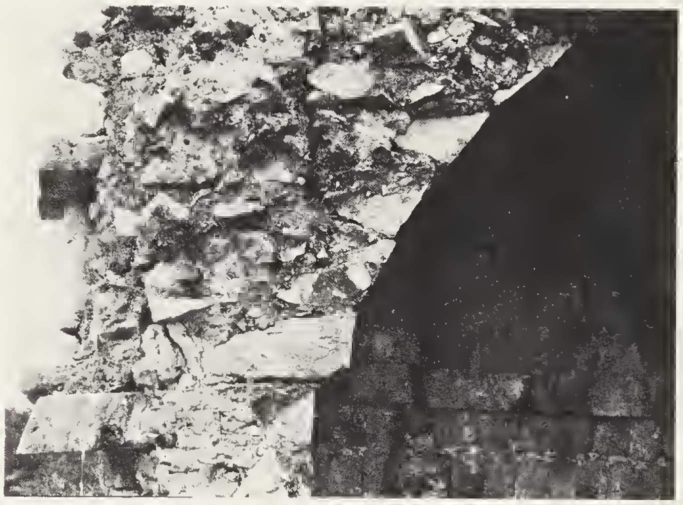


Figure 112. Chuncatzim, Structure 1. East wall of Room 10, looking south, showing primary course of medial molding, spring of vault, and upper facade and vault masonry.

Split column decoration in upper facade zone of lower story (figs. 105b, 107). Each column well tailed into hearting (figs. 110, 111a).

Traces of painted red circles around beam holes in Room 11.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Little information available without excavation. Projecting front range of rooms (Rooms 1–3) with square corners and surrounded by extraordinarily heavy interior walls

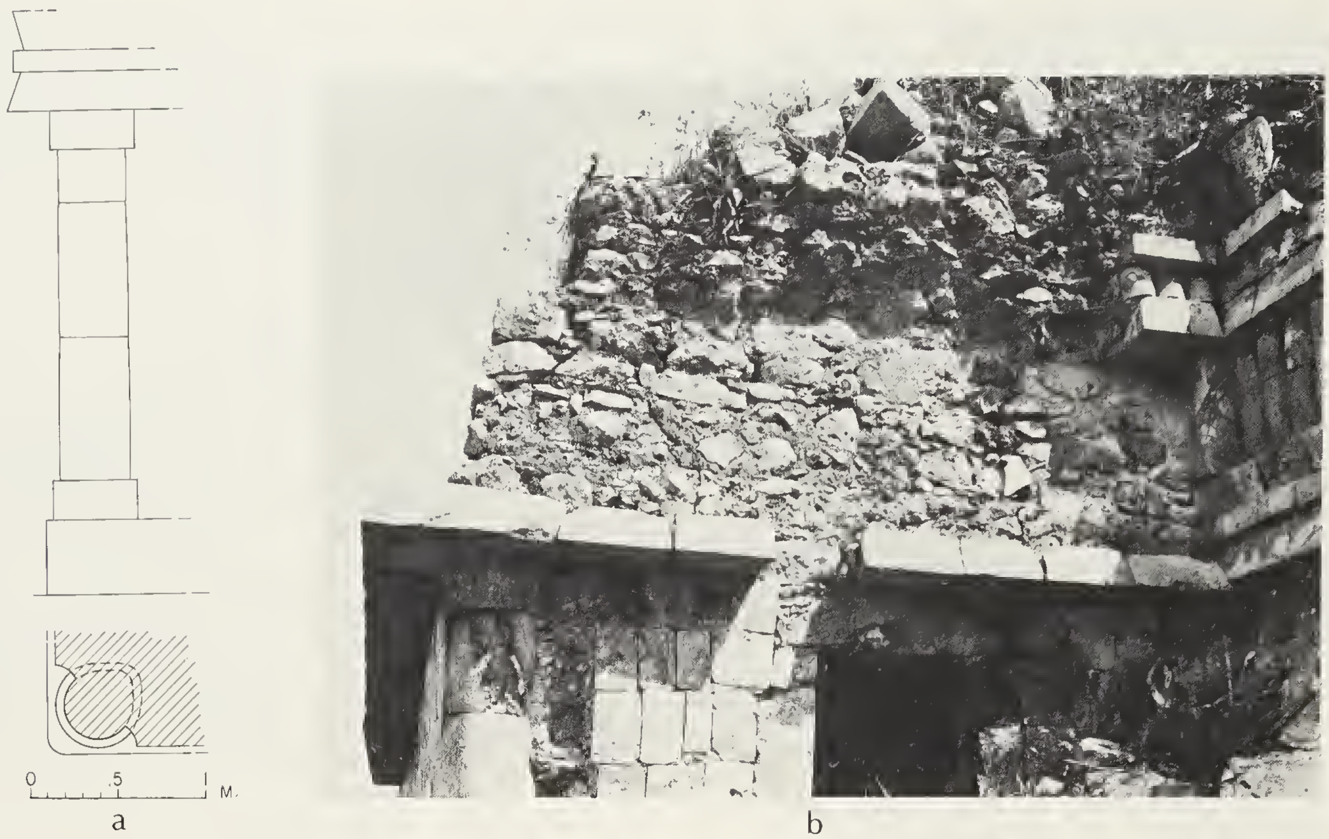


Figure 113. Chuncatzim, Structure 1: a, plan and elevation of three-quarter column at southeast corner of lower story; b, exterior corner of Room 8, looking northwest, showing three-quarter column at corner, primary course of medial molding, roughly plastered masonry behind facade decoration, and moldings and split columns of upper facade.

(fig. 103) might have been separate earlier building. Stairway to second story overlays upper-facade decoration and cornice molding of front range and is obviously secondary to it. What appears to have been exterior base molding, presumably of front range, is seen through hole in rear wall of Room 5. On other hand, there is no wall stone visible above this molding and wall joints at front square corners do not indicate Rooms 4 and 10 are secondary to Rooms 1–3. If Rooms 1–3 once stood as separate building, it appears that exterior facing stone was stripped off, presumably for use on enlarged structure. All of this must remain conjectural without excavation.

Structure 2

PLAN AND SECTION

See figures 103, 114.

SUBSTRUCTURE

Stairway. Small stairway, normal in all respects, leads up from court at east.

Construction. Extension of terrace supporting Structure 1. Same level and same construction.

SUPERSTRUCTURE

Plan. See figure 103.

Section. See figure 114.

Base Molding. Considerable question as to exact character of molding (figs. 106, 115). Lowest course and plain vertical course above it in original position in many places. Balls, only roughly finished on bottom, found in great profusion at west with fair number in place (fig. 115b). Number of balls and plaster marks on masonry indicate they were continuous across rear of structure. Only two balls, neither in position, observed at front.

Great many fallen stones similar to lowest course of molding found at both front and rear of structure, but none in position. Several rest on top of fill behind molding, and this, along with plaster marks on several stones, suggests arrangement shown in figure 115a, but by no means certain.

Building Sequence. No indication of any stone superstructure on platform surrounded by base molding. May have supported building of perishable materials or structure may never have been completed. Elaborate base molding suggests the latter.

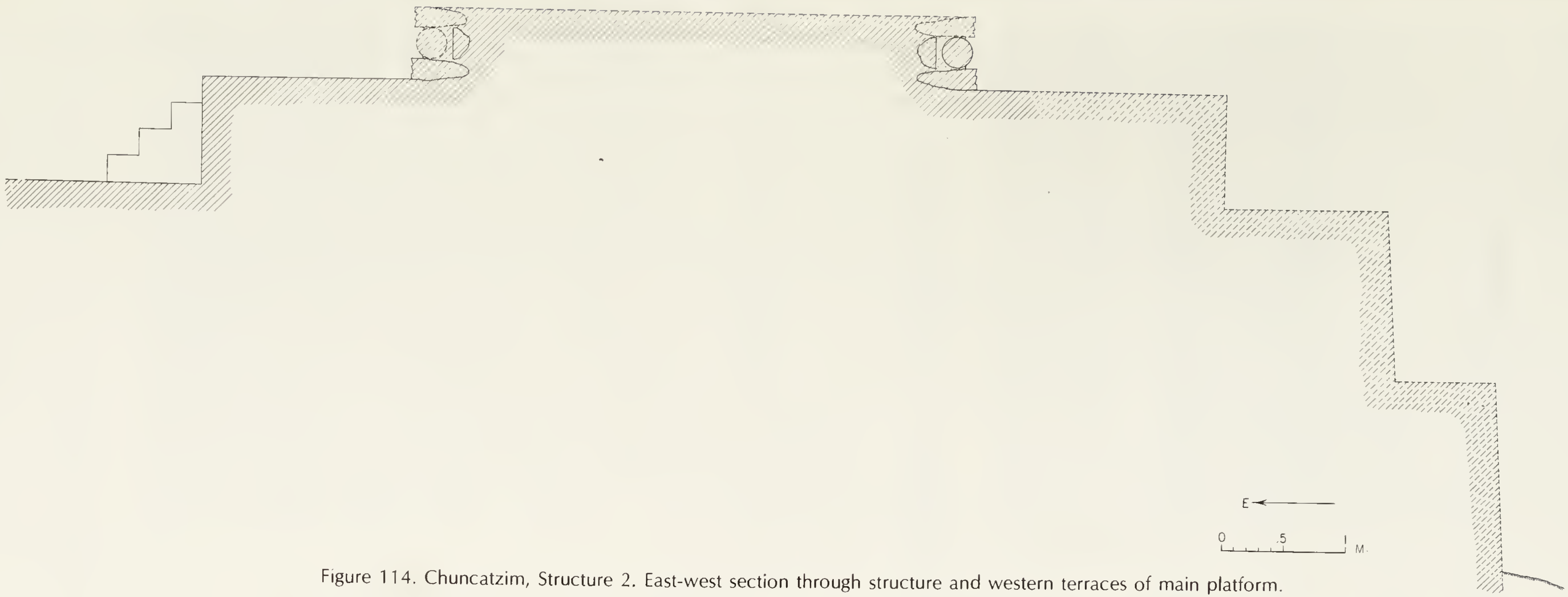


Figure 114. Chuncatzim, Structure 2. East-west section through structure and western terraces of main platform.

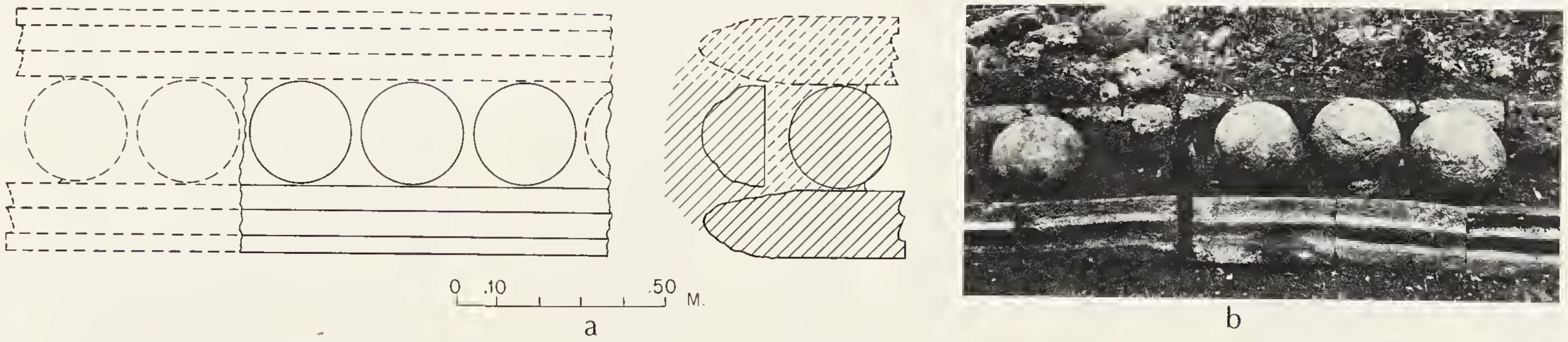


Figure 115. Chuncatzim, Structure 2: a, partly restored elevation and section of molding; b, view of molding, looking east.

Xlabpak, near Labna

There are undoubtedly many ruins known locally as Xlabpak. I am therefore identifying the present site as near Labna, the nearest location for which we have accurate geographical coordinates.

ETYMOLOGY

xlab, old or ruined; *pak,* wall (see Roys 1935, p. 3). Variant spelling: Xlabpahk. Other names: Maler-Xlabpak, Xlabpak Maler, Xlabpak-Dzalbay, Xta-anat-pat, Xta-anat-pak. Name of Chunkatzin (Kramer 1934, p. 133), a different site, comes from mislabeled photographs of E. H. Thompson's in Peabody Museum, Harvard University.

SITUATION

Approximately 5 km southwest of ranch of Sabacche and about 3 km west of Labna and of Chuncatzim.

TOPOGRAPHY

Not well known. Generally hilly country, but have impression courts and buildings rest on relatively level land.

WATER SUPPLY

See Labna and Sabacche. Large number of chultuns near Structure 1 and presumably elsewhere at site.

SIZE

Not well known but probably a fair-sized site. Group of three or four structures 200–300 m southwest of group containing Structures 1 and 2, and single building some 300 m north of latter. At least six house platforms with chultuns near Structures 1 and 2.

CIVIC PLAN

Unknown except for isolated groups and buildings. Structures 1 and 2 form court with buildings on two sides. Group to southwest probably forms court but not adequately explored. No apparent arrangement to house platforms other than rough tendency for axes of several platforms to be parallel (courtyards?). Location of house platforms may have been determined by character of bedrock and depth of soil so that chultuns could be dug without undue effort.

Orientation. Structure 1 faces 21° west of south and Structure 2 at right angle to it. Orientation of other buildings unknown.

REFERENCES

Maler 1902, pp. 204–205.
Sáenz 1968.

COURT OF STRUCTURE 1

PLAN

See figure 116.

CONSTRUCTION

Good-sized platform that supports Structures 1 and 2 and forms court before them. Usual large rough-stone retaining wall that varies in height from about .50 to 1 m above natural ground level. Platform runs into bedrock at northeast corner and little or no fill there, but rock may have been covered with plaster floor.

No stairway observed and main approach to court not apparent.

Chultun of normal size and design just in front of Structure 1. Although somewhat larger than might be expected, platform is typical of ordinary house platform and conceivably started as such.

Altar 1 near center of court (see Monuments, below).

Structure 1

(Palace, Main Palace, Principal Temple)

PLAN

See figure 116.

SUBSTRUCTURE

Building seems to rest directly on platform that forms Court of Structure 1 (see above).

SUPERSTRUCTURE

Plan. See figures 116, 119; and Sáenz 1968 (fig. 5).

Section. See figures 117, 119; and Sáenz (ibid.).

Elevation. See figures 118, 120; and Pijoan 1946 (fig. 718).West side of facade restored same as east side. In recent years building has undergone major restoration (see Sáenz 1968).

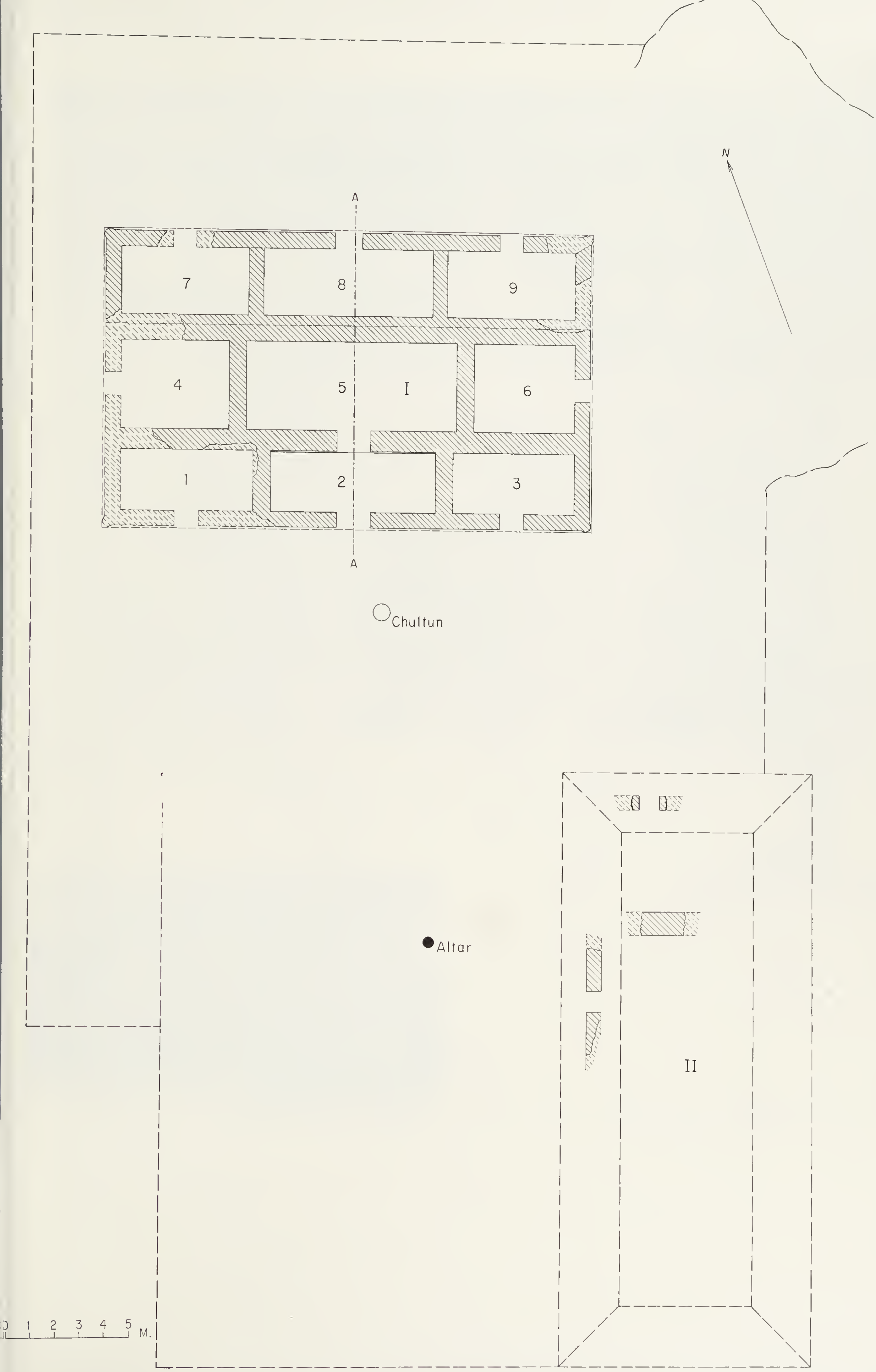
Base Molding. Three-member molding with continuous row of colonnettes in middle member and rectangular corners (figs. 118, 121).

Floor. White where visible. Rise in level in Room 5 (fig. 117).

Walls. Normal with facing stone of outer-wall surfaces better cut and dressed than that of inner-wall surfaces. Transverse walls of Rooms 7–9 secondary to outside (north) wall to height of medial molding, but this feature not seen elsewhere in building.

Lack of stone facing in corners at east ends of Rooms 3 and 6 indicates change of plan in course of construction. Also buried wall between Rooms 4–6 and Rooms 7–9 (see figs. 116, 117; and Secondary Construction . . ., below).

Figure 116. Xlabpak, Court of Structure 1. Plan of court and Structures 1 and 2.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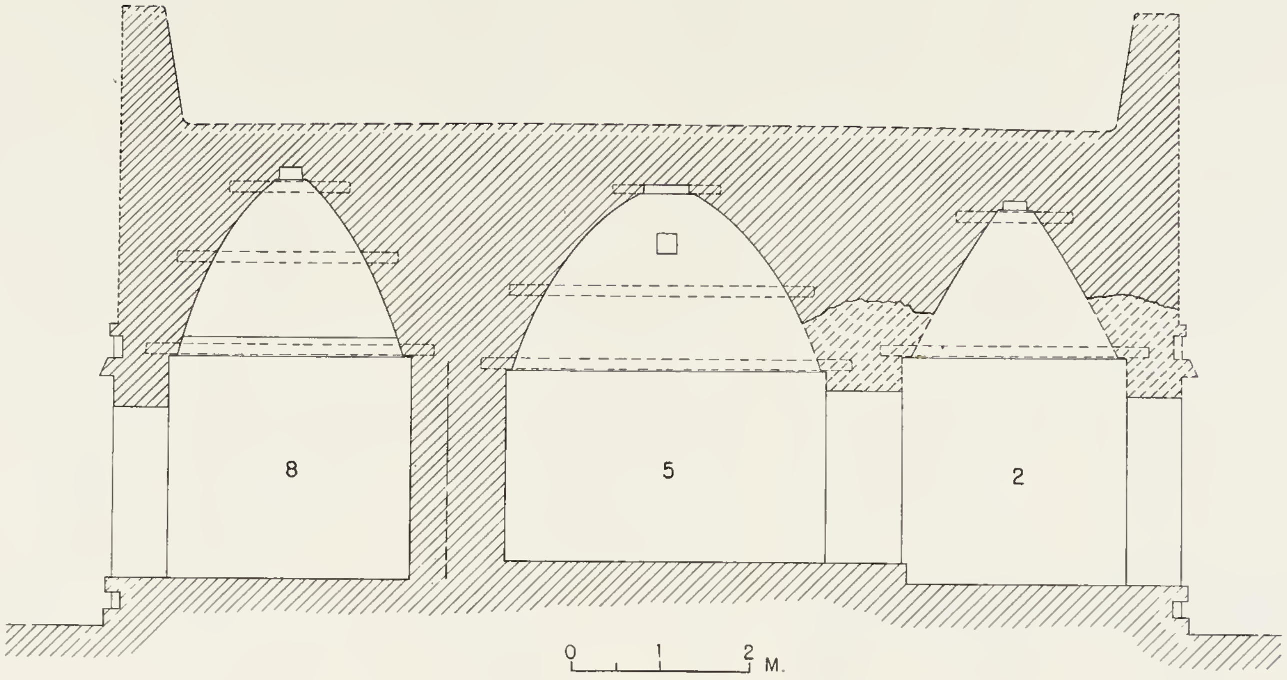


Figure 117. Xlabpak, Structure 1. Section through Rooms 2, 5, 8.

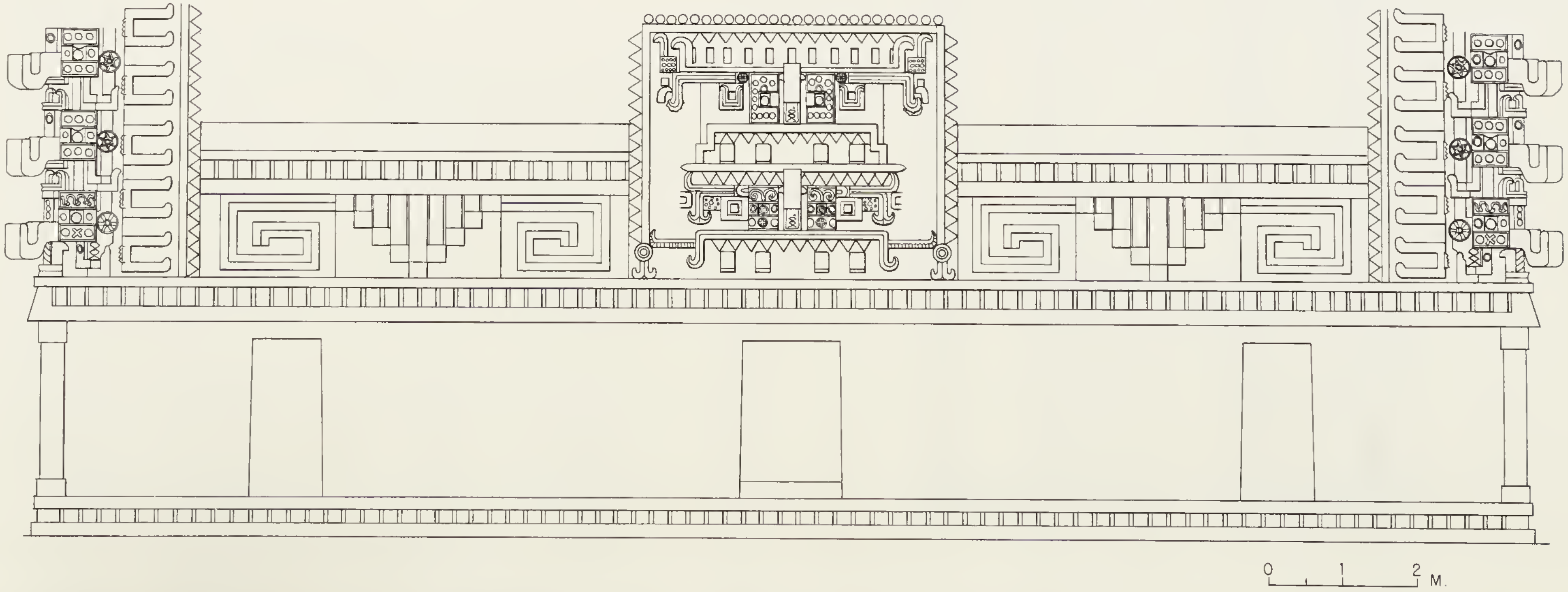


Figure 118. Xlabpak, Structure 1. Partly restored south elevation.

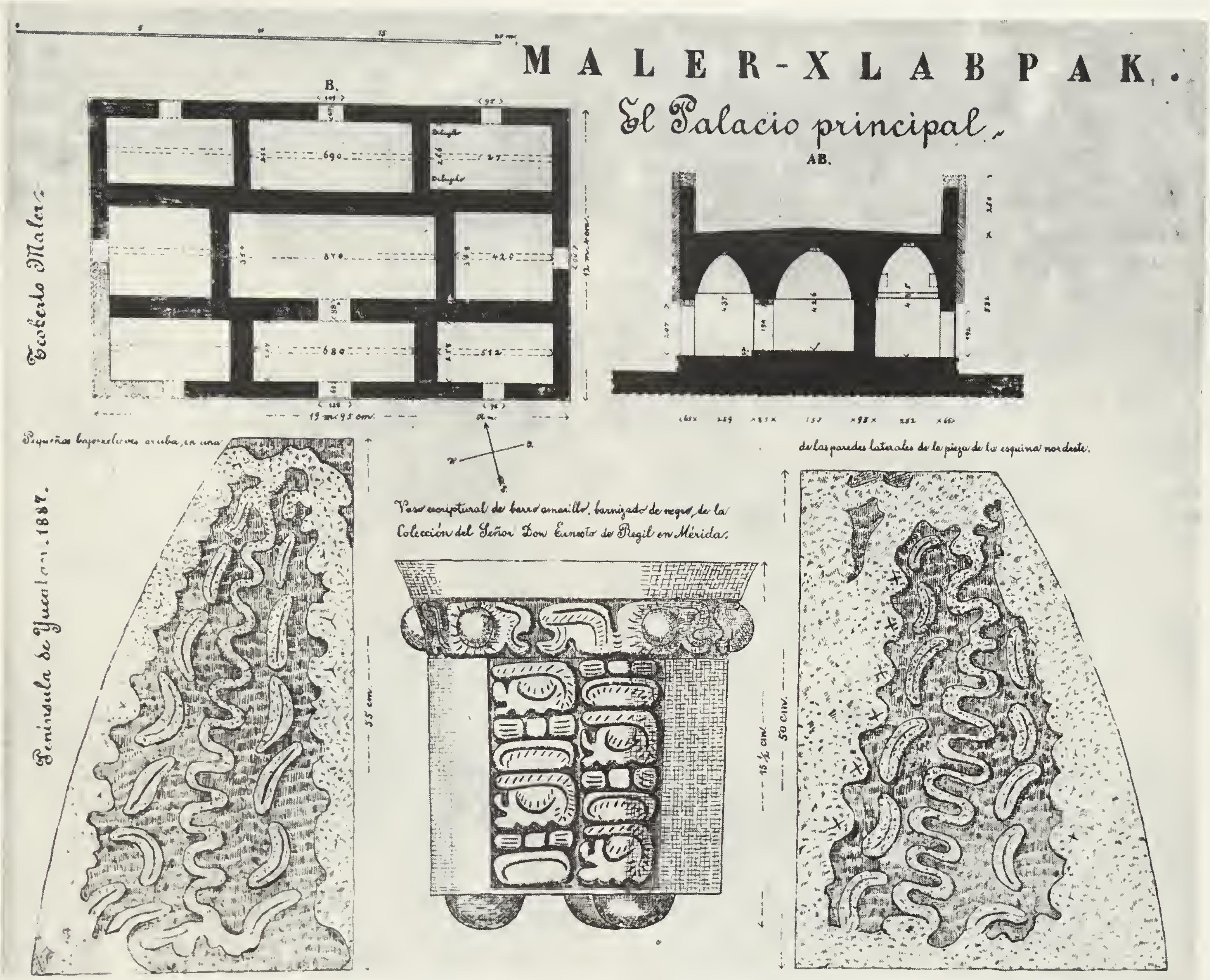

MALER-XLABPAK.
El Palacio principal.
B.
AB.
Teoberto Maler
Península de Yucatán, 1887.
19 m 95 cm
12 metros
Pequeños bajorrelieves arriba, en una
de las paredes laterales de la pieza de la esquina nordeste.
Vaso escriptural de barro amarillo, barnizado de negro, de la
Colección del Señor Don Ernesto de Regil en Mérida.
55 cm
15½ cm
50 cm

Figure 119. Xlabpak, Structure 1. Maler plan and section and detail of stucco decoration in Room 9. Description of detail reads: "Small bas-reliefs high up on one of the lateral walls of the northeast corner room."

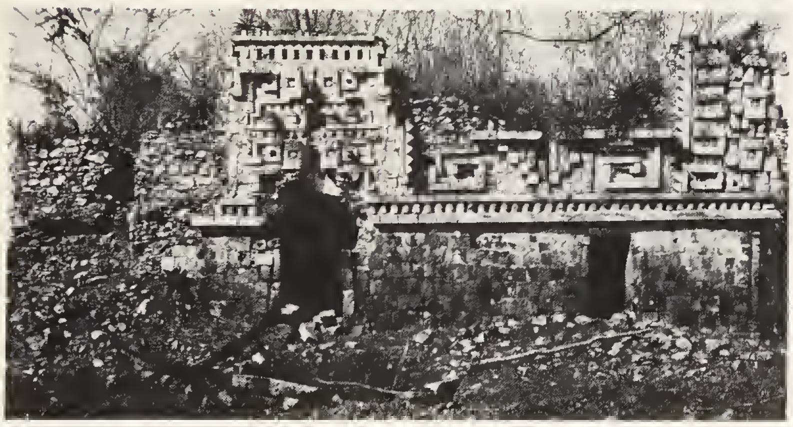


Figure 120. Xlabpak, Structure 1. View of south facade, looking north.

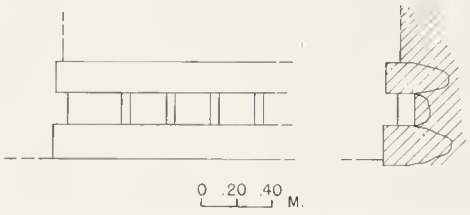


Figure 121. Xlabpak, Structure 1. Elevation and section of base molding at corner of building.

Doorways. All but doorways to Rooms 2 and 5 of usual construction with each stone running full width of jamb and with stone lintels (figs. 127b, 128). Jambs of doorway to Room 5 built of cornerstones with joint on face of jamb (cf. figs. 195, 205a). Wide doorways to Rooms 2 and 5 apparently spanned by wooden lintels now gone. Impressions in mortar above western jamb of doorway to Room 5 indicate two beams.

Wall Depressions. Cordholders of common tongue-at-corner and tongue-at-side-of-stone varieties (cf. fig. 136e). Always on inside walls beside doorways and several rooms with as many as four in vertical row at each side doorway.

Usual hemispheroid rod sockets in doorjambs (cf. fig. 146b).

Small L-shaped cupboardlike recess in east end of vault of Room 5 (fig. 122). Lined inside with faced stone and roofed with small capstones. Located 3.5 m above floor of room with very difficult access.

Vaults and Beams. Mainly noteworthy for breadth of vaults spanning Rooms 4–6 (fig. 117). Stone well faced and usual mixture of nonspecialized and semispecialized stone. Vaults of Rooms 4–6 pronouncedly arched, and upper part of soffit slopes are tipped at wide angle from vertical (fig. 122).

Large number of beam holes in vaults (fig. 117). In Room 5 one near each end of room in spring course, four halfway up vault, four in small offset beneath capstones. Considerable variation between rooms although two holes in spring course fairly constant. Course of stone immediately below small offset under capstones a favorite level and Room 8 has seven at that level.

Moldings. Typical three-member medial molding with colonnettes in middle member terminated at corners by rectangular apron element (see figs. 118, 123a, 125b). Cornerstone of primary member highly specialized (cf. fig. 111b).

What remains of cornice molding exactly like medial molding (fig. 128), but presumably carried coping course now fallen. One questionable coping stone .37 m high (fig. 123b).

Decoration (see Hissink 1934, pp. 52–54, 99–100; Saenz 1968, figs. 6, 7). Corner-facade columns with rounded bases and capitals in lower wall zone (figs. 118, 124). Bases, column drums, and capitals are specialized stones with tenons extending well into hearting of walls.

Upper wall zone carries series of superimposed masks that rise well above roof line at corners of building (figs. 118, 125) and over central doorways of north and south facades (figs. 118, 120, 126, 127). Upper elements of masks fallen but probably did not rise much beyond height shown in partially restored drawings.

Step and fret design, similar to that on north and south facades (fig. 118), but separated from corner masks by three colonnettes at end of each fret, on east upper facade (fig. 128) and presumably on west.

Remains of considerably eroded stucco decoration on west end of vault in Room 9 (fig. 119).

Traces of red circles painted around beam holes fairly numerous.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Buried face of earlier wall hidden inside longitudinal wall between central (Rooms 4–6) and northern (Rooms 7–9) ranges of rooms (see figs. 116, 117). Quality of wall stone and old corner stone visible in east facade indicate buried face once outside wall. Buried wall rises to height of medial molding, above which is hearting between vaults.

Northern range apparently conceived by builders after walls, and possibly vaults, of central and southern ranges had been built. Old north wall then thickened, in accordance with custom of making interior walls heavier than outer in order to carry weight of two vaults, and northern range built. Balanced design of decoration on east facade suggests facing of upper facade not applied until all vaults had been constructed, but may have been dismantling and rebuilding.

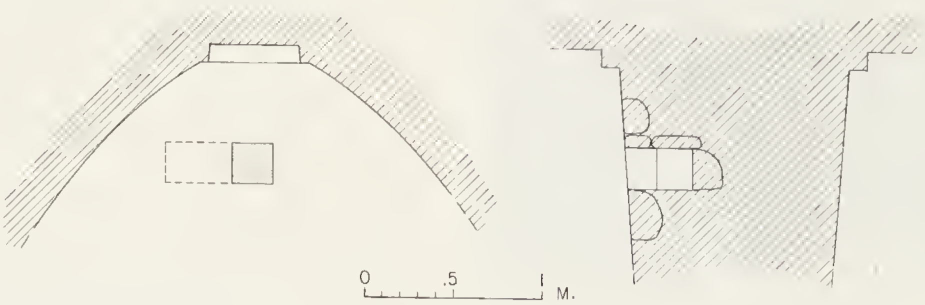


Figure 122. Xlabpak, Structure 1. Elevation and section of wall niche in east end of vault in Room 5.

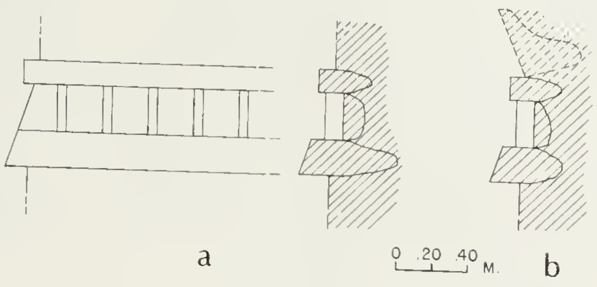


Figure 123. Xlabpak, Structure 1: a, elevation and section of medial molding; b, section of cornice molding.

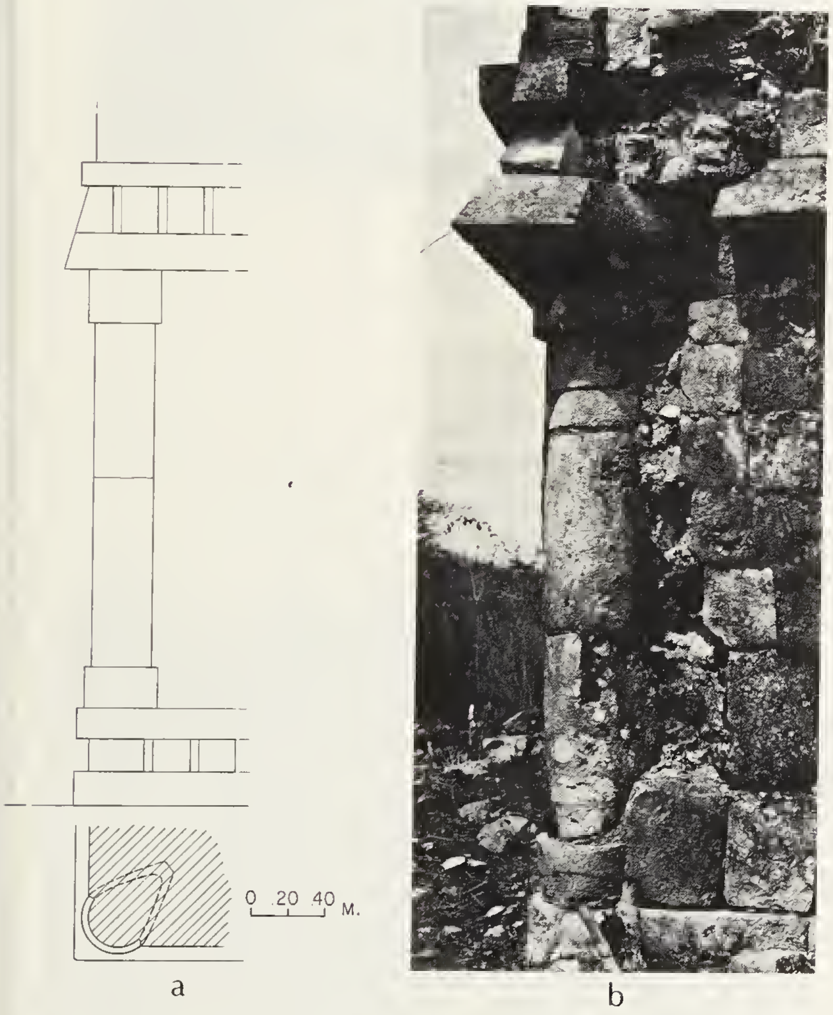


Figure 124. Xlabpak, Structure 1: a, plan and elevation of facade column at each corner of building; b, southeast corner, looking west.

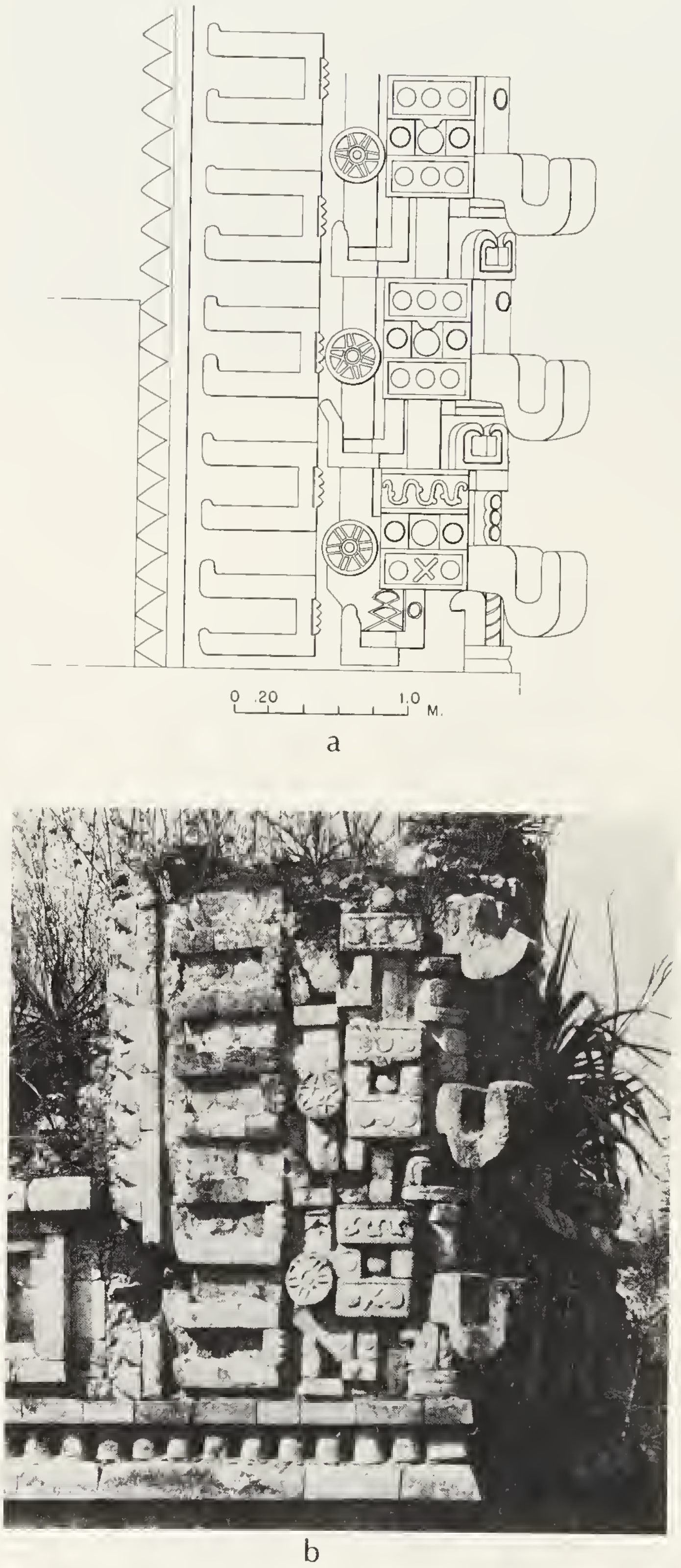


Figure 125. Xlabpak, Structure 1: a, elevation of superimposed masks at corner of building; b, masks at southeast corner, looking north.

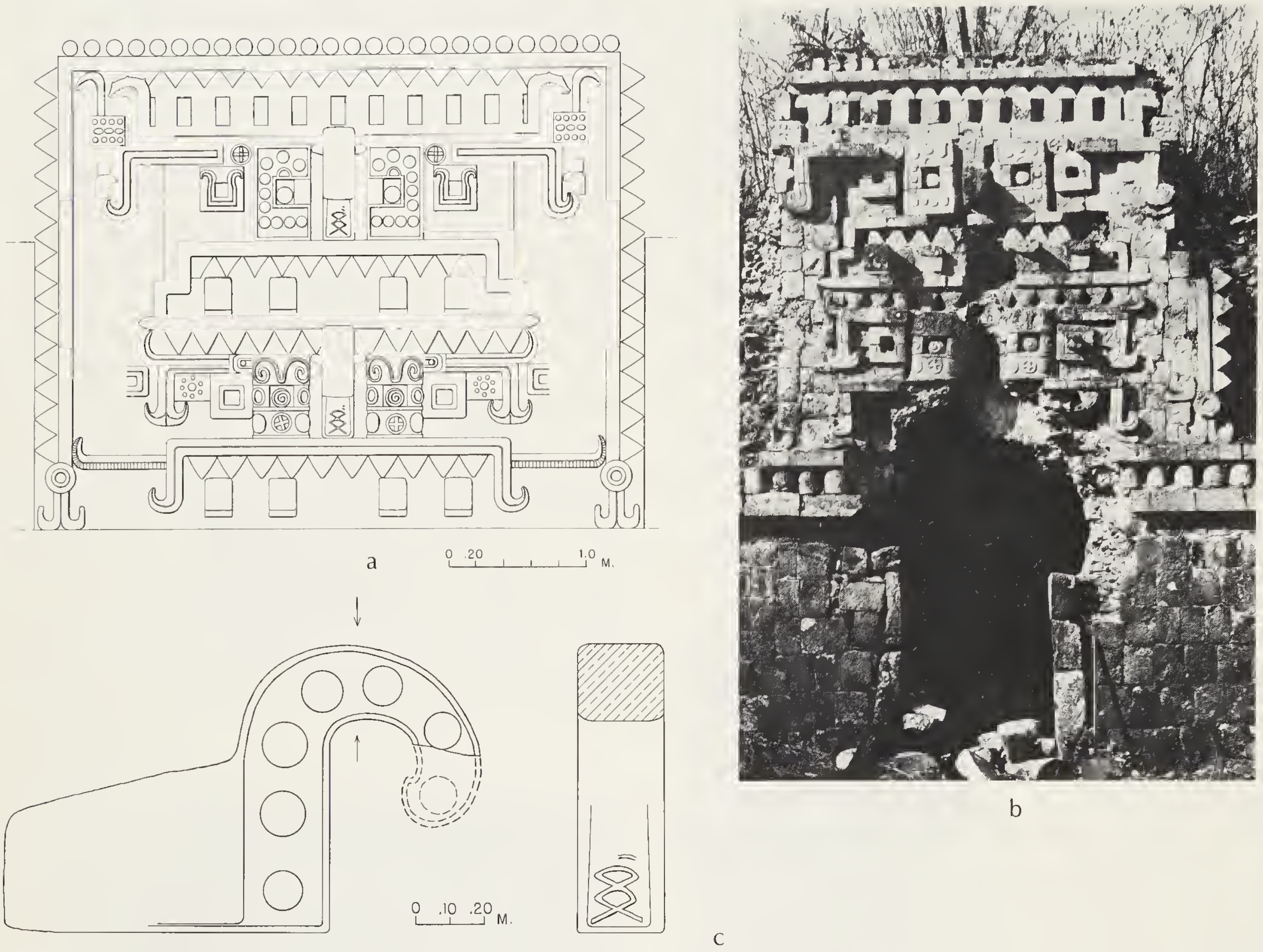


Figure 126. Xlabpak, Structure 1: a, elevation of superimposed masks over doorway to Room 2; b, view of doorway to Room 2 and masks above entrance; c, side and front elevations of snout from lower mask over doorway to Room 2.

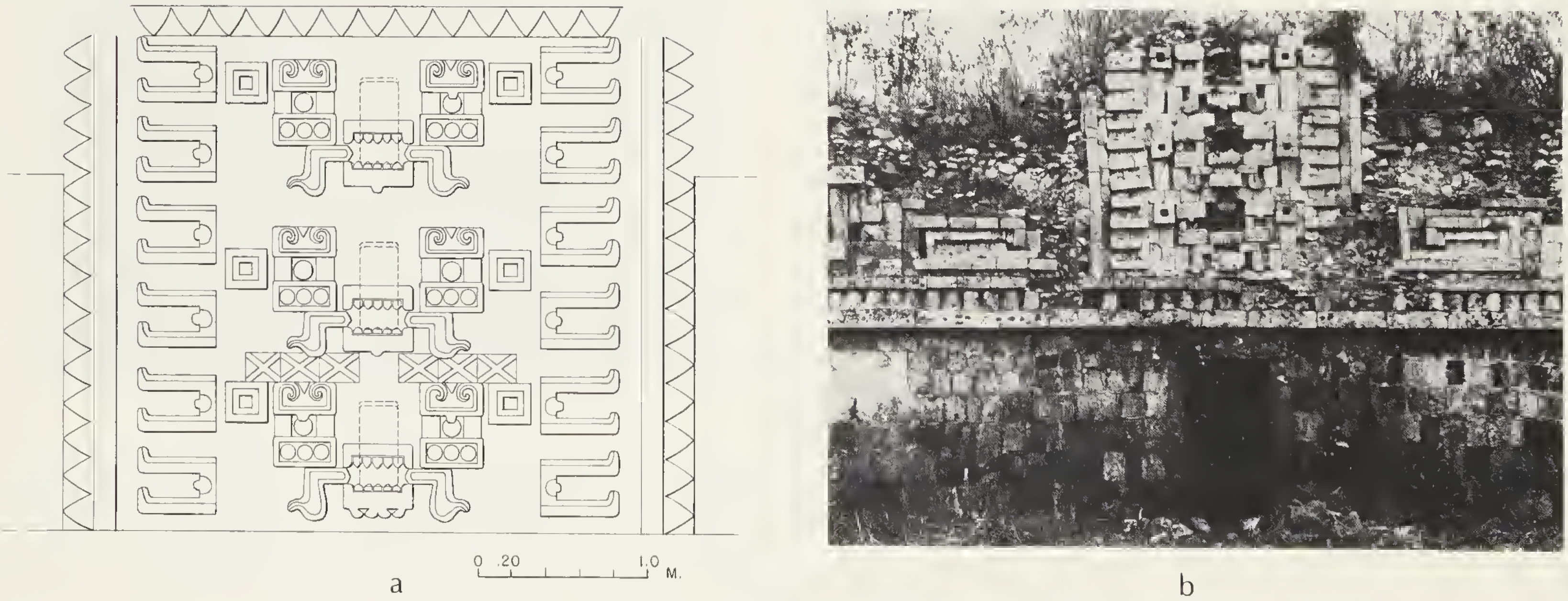


Figure 127. Xlabpak, Structure 1: a, elevation of superimposed masks over doorway to Room 8; b, doorway to Room 8 and masks above entrance.

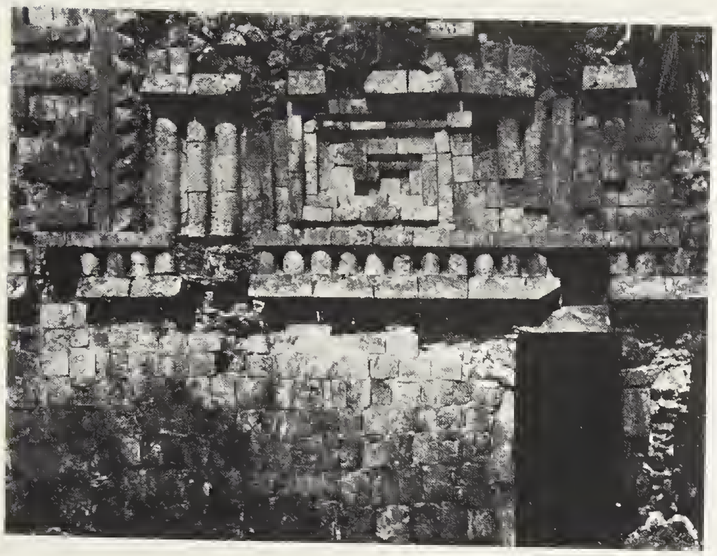


Figure 128. Xlabpak, Structure 1. Doorway to Room 6 and facade decoration at east end of building, looking west.

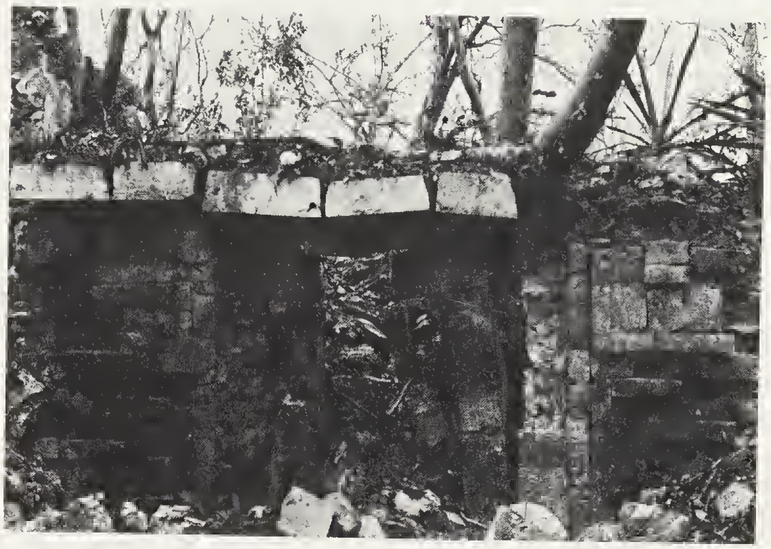


Figure 129. Xlabpak, Structure 2. Doorway in west wall, facade decoration, and remains of medial molding, looking east.

Structure 2

PLAN

See figure 116.

SUBSTRUCTURE

See Court of Structure 1 (above).

SUPERSTRUCTURE

Badly fallen, and only small amounts of wall visible (fig. 116). Doorway at north, one at west, and section of transverse wall showing spring level and end of vault but not to height of capstones. Stone lintel over west doorway and primary course, a typical apron member, of medial molding rests on lintel (fig. 129).

Wall Depression. Cupboardlike recess, situated similarly to recess in Structure 1 (see above), in south end of north vault (fig. 130). Small lintel over entrance, capstones, and some faced wall stone lining interior, but no plaster. Two carved elements from fillet decoration of mask in masonry at bottom of entrance.

Decoration. Facade at each side of western doorway carries large fret design (fig. 129).

Long and short colonnettes found in debris outside building.

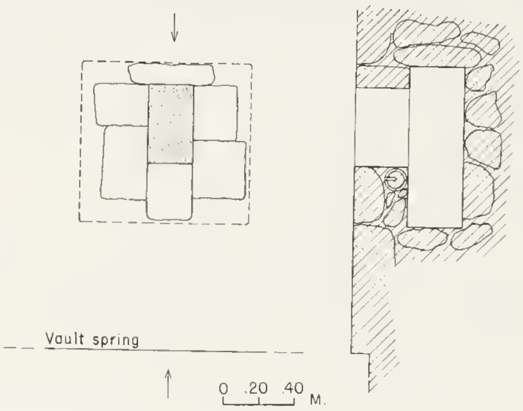


Figure 130. Xlabpak, Structure 2. Elevation and section of wall niche in south end of vault of north or northwest room.

MONUMENT

Altar 1. Plain (fig. 131). Diameter at top .52 m.

Near center of court of Structure 1 (see fig. 116). Tipped on side and probably not *in situ*.

Column altar very slightly concave on top. Well cut and dressed and nicely shaped at bottom.

Figure 131. Xlabpak. Altar 1, profile.

Sabacche

ETYMOLOGY

Maler (1895, p. 248) says *sabacche* = place of the ink tree, and explains that "A certain tree with black sap is called sabacche; sabac black fluid, che tree." *sabacche* or *zabacche* is the princewood shrub or tree (*Exostema caribaeum;* see Roys 1931, p. 301); at the place of is implied (see Roys 1935, p. 9). Variant spellings: Zabacché, Sabaché, Sabacke, Sabachshé, Sabachtsché, Sabachté, Sabbasche, Sakbakche, Sebatché, Sebatsche, Sebetche.

SITUATION

Little over 1 km south of ranch of Sabacche (see fig. 2).

TOPOGRAPHY

North-south running ridge at western edge of site. Building remains on crest and eastern slope of ridge (Str. 5) and on valley floor (Strs. 1–4).

WATER SUPPLY

Nearest known permanent natural water supply at Chac (see p. 138), about 8 km distant. Collection of rain water only nearby supply for ancient Maya (see E. H. Thompson 1897, pp. 5–8). Immense number of chultuns associated with the ruins. Modern water supply from deep artificial (post-Conquest) wells spaced at rather wide intervals. Well at ranch of Sabacche 65 m deep. Other wells at Kom and at Tabi.

MAP

None but sketch map in this report (fig. 2).

SIZE

Not well known. Area extending 2 km south from ranch of Sabacche and about 1 km east-west probably includes majority of structures at this site. Region so abounding in ruins that single buildings or small groups of structures occur on every hand, and difficult to limit any one site.

CIVIC PLAN

Plan of site unknown. Structures 1–4 form partially enclosed court, and other structures seen on two sides of court. Tendency to build on elevations, but by no means universal. Majority of hilltops show terracing with dwellings or some artificial remains. Particularly true of western ridge where there is succession of terraces and house foundations.

Sabacche and Chuncatzim conceivably one site, or, as earlier mentioned, Chuncatzim could be part of Labna.

Orientation. Structure 1 faces 21° south of east. Structure 5 faces 12° south of east. No accurate sightings on other buildings.

REFERENCES

Maler 1895, p. 248.
Stephens 1843, 2:41–46.

COURT OF STRUCTURE 1

PLAN

See figure 132.

CONSTRUCTION

Group rests on relatively level terrain and floor of court only slightly raised above natural ground level. Main approach to court not obvious but may have been between Structures 2 and 3.

No chultuns observed but may well be present.

Altar 1 near center of court (see Monuments, below).

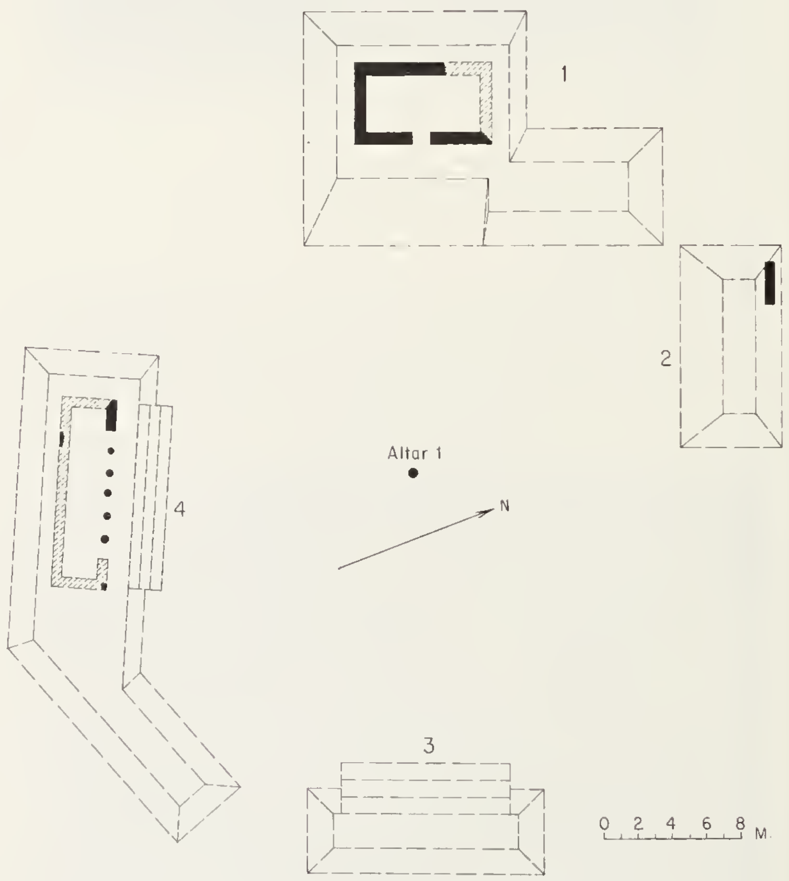


Figure 132. Sabacche, Court of Structure 1. Plan of court and surrounding structures.

Structure 1

(Temple, Second Temple)

PLAN

See figure 132.

SUBSTRUCTURE

Stairway. None visible, but presumably was centered on doorway of superstructure and probably had four or five steps.

Construction. Excavation at rear of platform revealed vertical wall of dressed stone standing to height of two courses (fig. 133). Layer of medium-sized rough stone beneath wall and beneath floor for short distance in front of wall. Local red earth *(kancab)* beneath this. Remains of heavy plaster .02 m thick on wall. Judge platform to have been about 1.10–1.35 m high at rear, but measurement uncertain.

Construction unusual in employing dressed-stone facing on substructure.

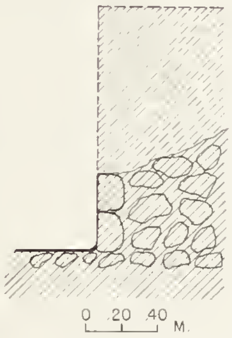


Figure 133. Sabacche, Structure 1. Section at rear of substructural platform.

SUPERSTRUCTURE

(fig. 134)

Plan. See figure 132.

Section. See figure 135b. Roof structure partially restored.

Elevation. See figure 135a. Restored with aid of Maler (1895, fig. 2) illustration and E. H. Thompson photograph in Peabody Museum, Harvard University.

Base Molding and Floor. Buried beneath debris. Should expect simple molding of single course of dressed stone.

Walls. Rather heavy for small building. Front and rear walls .75 m thick, south end wall .68 m. Faced with well-cut dressed stone running from about .15 by .20 m to .35 by .45 m on the face (fig. 134). Tailed in fairly deeply with usual rounded backs. Facing of inner wall surfaces not so carefully cut and dressed as that of outer surfaces. Large finely cut outer cornerstones, one of which .40 by .52 m by 1.25 m high. Wall capped by plaster stratum beneath medial molding (see Structure 5, Vaults).

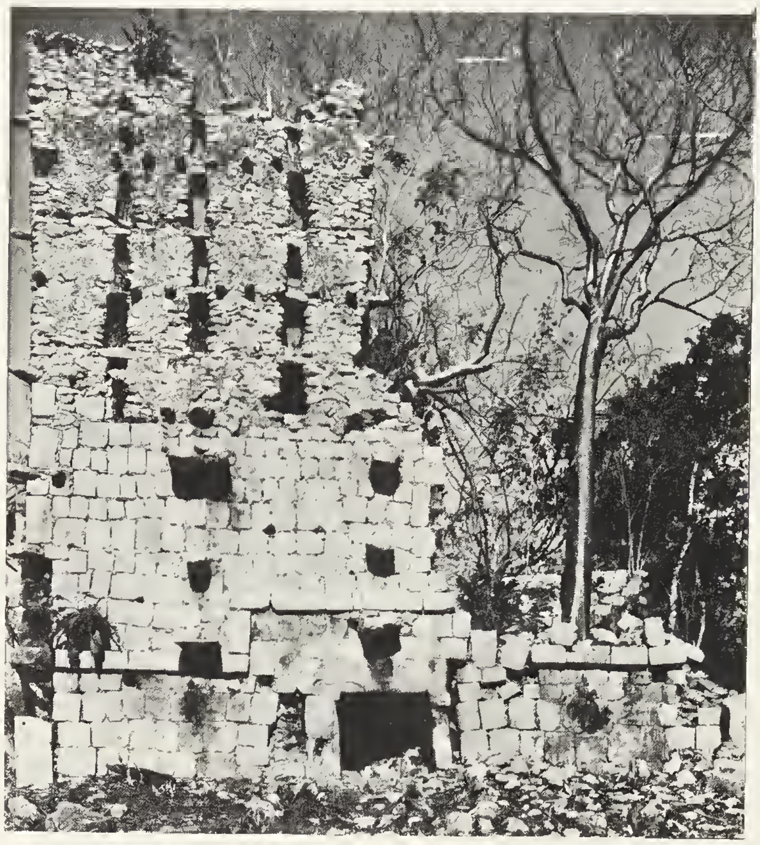


Figure 134. Sabacche, Structure 1. View of temple, looking west.

Doorway. Very large single stone forms south jamb (fig. 136d). Heavy lintel.

Wall Depressions. Hemispheroid depressions .15–.20 m in diameter and .15 m deep on outer surface of front and rear walls beneath medial molding (figs. 134, 136c; and see Labna, Str. 1, South Wing, p. 28). Four in front wall (fig. 135a) and apparently three evenly spaced in rear wall. Trace of orange paint in depression in front wall, red paint in depression in rear wall.

Tongue-at-side and tongue-at-corner varieties of cordholders on inner wall at side of doorway (fig. 136e).

Vault and Beams. Characteristic arched sides rising to small offset formed by corbels beneath capstones, but unusual in having offset at end of vault, one course above level of spring (fig. 135b). Last feature related to rise of medial molding at ends of building (see Molding, below). Vault stone, not particularly well dressed, mixture of nonspecialized and specialized shapes (fig. 136b, g). Capstones only roughly shaped and lower face may be natural plane of cleavage (fig. 136a).

Beam holes .11 m in diameter immediately beneath spring of vault and about .50 m from ends of room. No beam holes visible in vault.

Molding. Medial molding simple rectangular string course with overhang of .10 m and height of .20 m (fig. 135b). Located at level immediately below spring of vault on rear and front walls except where it rises over doorway (figs. 134, 135a). Molding turns corners at this level, then

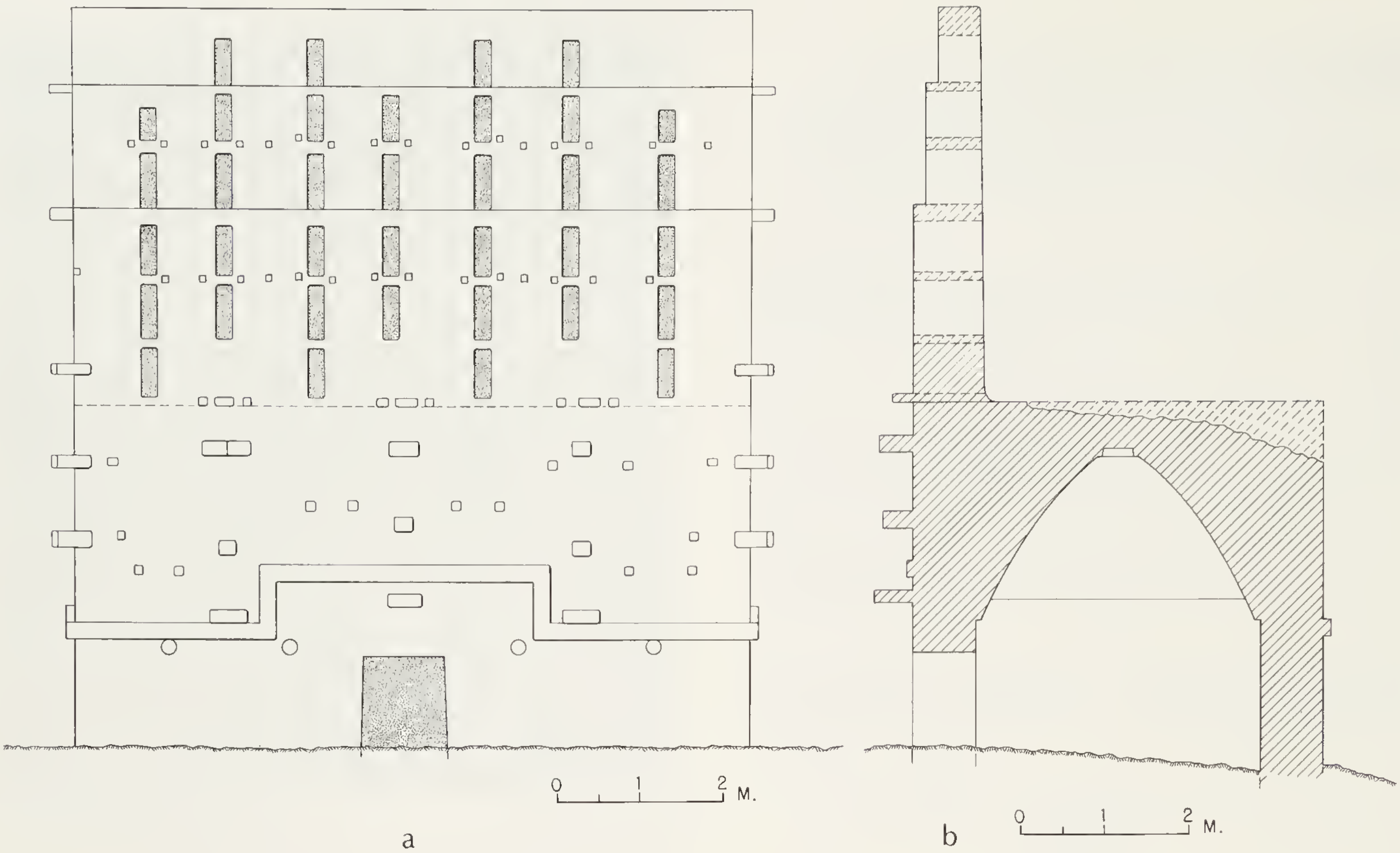


Figure 135. Sabacche, Structure 1: a, restored elevation of east facade above line of debris; b, east-west section through doorway; floor hidden beneath debris.

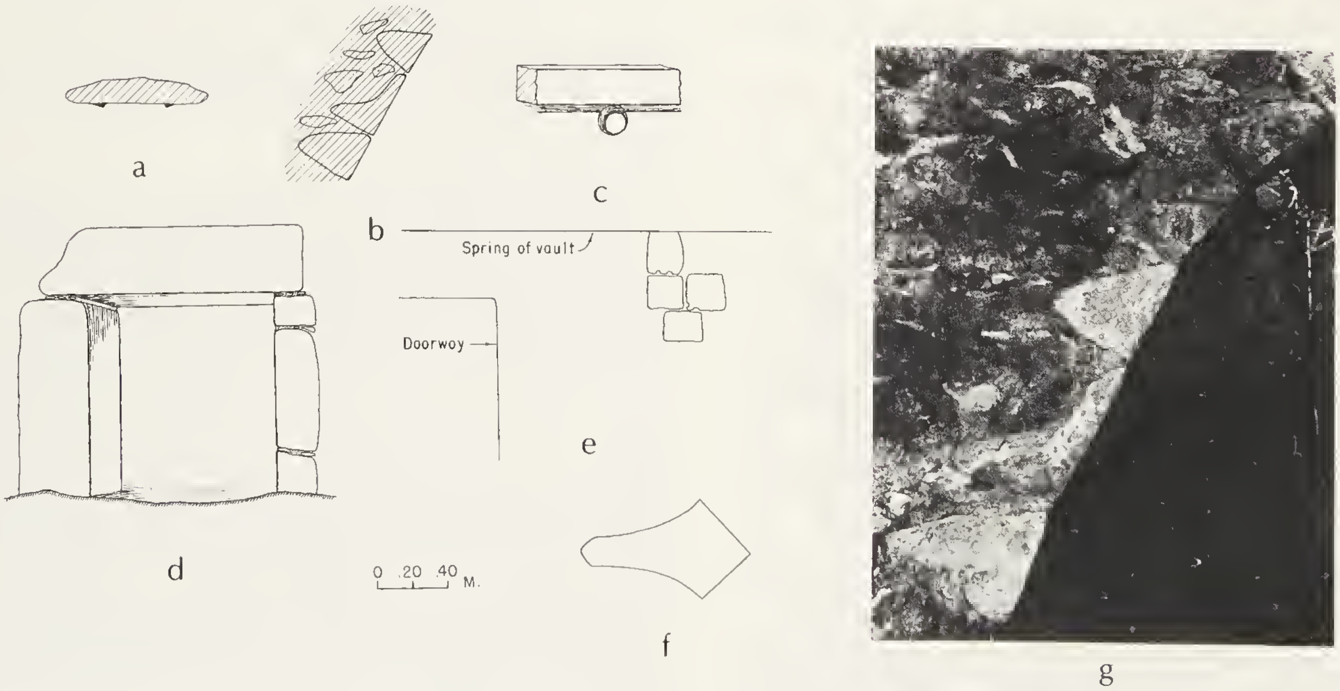


Figure 136. Sabacche, Structure 1. Architectural details: a, section of capstone with plaster marks on under surface showing location of corbels at top of vault; b. section of typical vault stones; c, sketch of medial molding and hemispherical depression; d, sketch of doorway, showing large jamb stone and heavy lintel; e, elevation of section of inner front wall, showing south doorjamb, spring of vault, and two varieties of cordholders; f, plan of cornerstone of medial molding; g, section of vault.

rises one course across ends of building. Molding stones deeply tailed in, and well cut, highly specialized cornerstones (fig. 136f).

Apparently no cornice molding.

Roof. Good sample of roof construction. Large flat slabs bedded in mortar above capstones. Smaller flat stones size of one's hand and larger above slabs. Pure lime mortar forms upper surface. Thickness of roof about .55 m from underside of capstones.

Roof Structure. Perforated flying facade with numerous stone tenons to support stucco decoration at front and at ends (fig. 135). Built mostly of rather roughly dressed stone and once heavily plastered (fig. 134).

Decoration. All decoration apparently executed in stucco and paint and must have extended from medial molding to top of flying facade. Remains of stucco in perforations in flying facade, but major decoration presumably supported by stone tenons. Traces of red and orange paint in sheltered places.

Not enough remains to determine nature of decoration but, judging from Structure 4 at Labna (see above), much of it anthropomorphic.

Structure 4

PLAN AND ELEVATION

See figures 132, 137.

SUBSTRUCTURE

Stairway. Steps built of faced stone at risers with rubble behind that presumably was plastered on upper surface to form smooth treads. Each step .75 m deep and about .25 m high.

SUPERSTRUCTURE

Plan. See figure 137.

Elevation. See figure 137. Partially restored.

Base Molding. Not mentioned in notes or shown in drawings. Probably an omission and every chance building carried base molding. Simple molding of single-course faced stone about .25 m high might be supposed.

Walls. Front wall .60 m thick. No other measure obtained.

Stone well faced and large nicely cut cornerstones at two front corners.

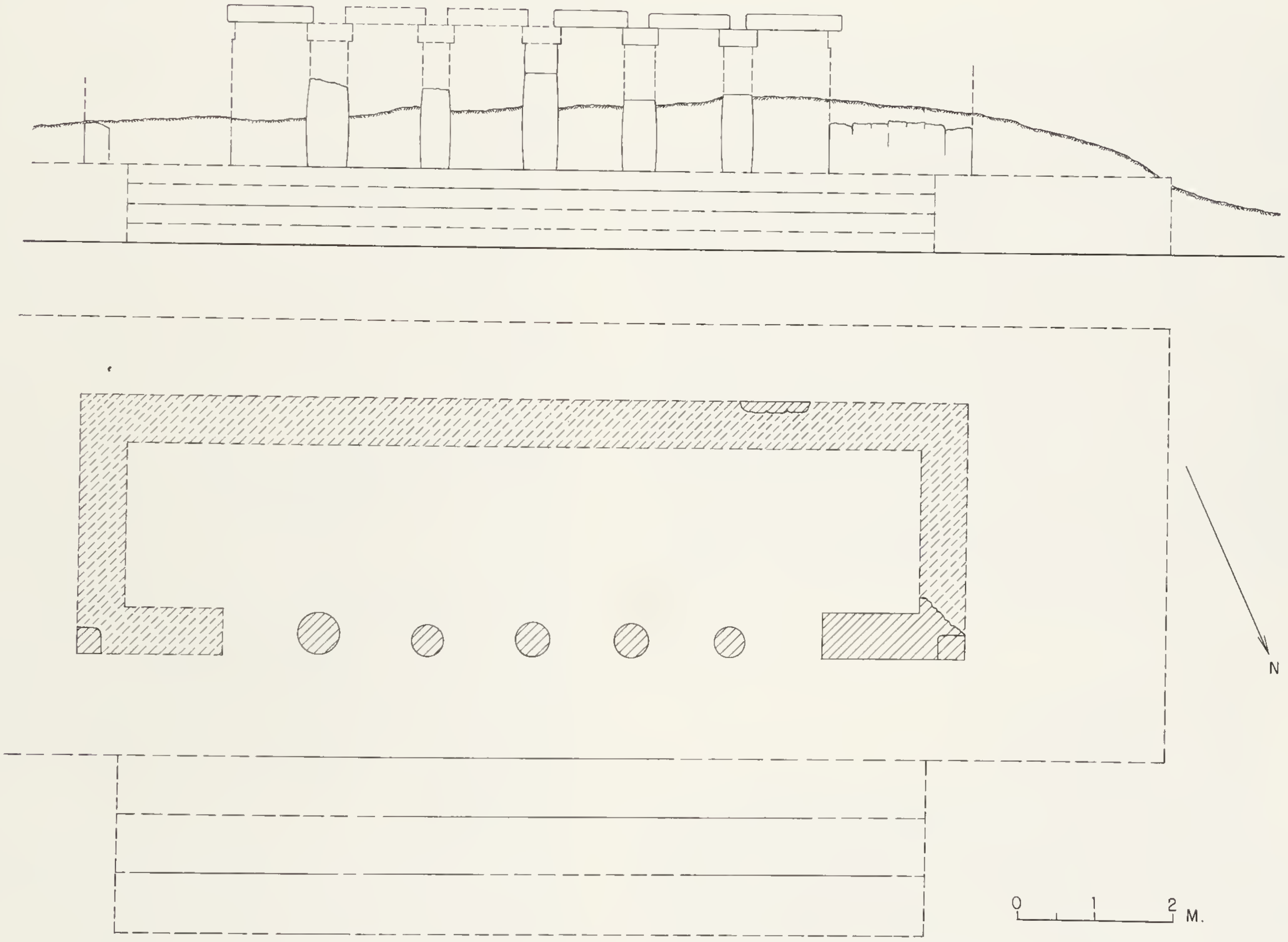


Figure 137. Sabacche, Structure 4. Partly restored north elevation and plan.

Doorway. Most unusual multiple entrance of five columns and six openings (fig. 137). Virtually unknown elsewhere in Puuc architecture (but see pp. 570, 572).

Visible western jamb built of two cornerstones side by side. Two fallen capitals and four stone lintels. Height of doorway uncertain, but column drum found at rear of building with same diameter as shortest and tallest standing column shafts gives total doorway height, including capital, of 1.52 m or 1.83 m. Elevation restored at maximum height but either measure possible.

Vault and Roof. Walls heavy enough to have supported vault but no identifiable vault stones showing in fall of building. Maximum height of debris 1 m or less above floor level, which suggests building carried flat beam-and-mortar roof rather than vault, but cannot be certain.

Structure 5

(Principal Structure, Palace, Serpent Head Palace)

PLAN AND SECTIONS

See figures 138, 139.

SUBSTRUCTURE

Stairways. Only trace of stairway at eastern edge of large lower platform. Height of remaining step stone suggests six steps. Width of stairway unknown. Each riser and tread probably formed by single course of stones.

Staircase to upper platform made of steps with broad treads built of rubble, presumably once surfaced with plaster and faced at risers with course of well-cut stone (fig. 140). Rectangular blocks of masonry at either end of third step that stood to height of that step or possibly higher.

Construction. Platforms rest on top of natural rise so height of retaining walls varies with slope of ground, roughly from 1 to 3 m. Walls vertical, or nearly vertical, and built of very large roughly shaped, or even unshaped, stone that runs up to 1 m square on exposed face. No signs of mortar and do not know if walls were dry laid or if mortar has weathered out. Core of platforms of loose stone fill, but much of interior undoubtedly taken up by bedrock.

No chultuns observed.

SUPERSTRUCTURE

NORTH WING (Rooms 1, 2)

Plan. See figure 138.

Section. See figure 141.

Elevation. See figure 142. Partially restored.

Base Molding. Typical three-member base molding with colonnettes in middle member. Colonnettes continuous across front of building (fig. 142), at rear occur in groups of five separated by two plain stones (fig. 143).

Floor. Very little to be seen. White where visible.

Walls. Front and south walls .53–.54 m thick at jambs, increasing to about .60 m at corners of rooms. Increase caused by flare of inner wall faces (fig. 144a). Rear wall about .62 m thick. Transverse wall between Rooms 1 and 2 is .93 m thick.

Outer-wall facing of well-cut, well-dressed stone of conventional shape and fairly constant in size, about .30 by .30 m on face (fig. 144b). Stone of inner-wall facing well squared but poorly dressed and considerable variation in size, running from about .12 by .18 m to .42 by .48 m (fig. 145). Wall capped with plaster layer just below medial molding, and course of inner wall facing below spring of vault and resting on plaster cap is faintly recessed. Poor bonding has allowed longitudinal walls to pull away from transverse wall between Rooms 1 and 2 although hearting of walls was originally tied together. Inner wall surfaces covered with cream-colored plaster.

Southeast outer cornerstones faintly rounded at corner. Uppermost stone slightly overhanging, suggesting capital (see figs. 142, 144b). Probably from slipping, but may have been by design.

Doorways. Jambs and lintels of finely-cut and dressed stone. Each jamb stone runs full thickness of wall (fig. 144). Doorways narrow slightly at top.

Wall Depressions. Common varieties of tongue-at-corner-of-stone and tongue-at-side-of-stone cordholders (cf. fig. 136e). Also hole at corner of stone (fig. 146a).

Occur in pairs on inner-wall surface at each side of east doorway to Room 2. Pair at level spring of vault, at level underside of lintel, and one course above floor.

Hemispheroid depressions that presumably served as rod holders in jambs of doorway to Room 2 (fig. 146b). Depressions about .03 m in diameter by .01 m deep.

Depression about .13 by .15 m by .09 m deep in outer wall just below medial molding and in line with wall between Rooms 1 and 2. Smoothly plastered inside (cf. fig. 136c).

Vaults and Beams. Characteristic of classic Puuc architectural tradition in having arched soffit slopes, nearly vertical vault ends, offset at spring that is carried across end walls, and small offset course beneath capstones (fig. 141). Spring course of well-faced stone and deeply tenoned in wall (fig. 146b). No good cross section of vault visible, but facing apparently mixture of nonspecialized and specialized stone. Better faced than inner wall stone and comparable to outer-wall facing. Masonry hearting behind vault facing is of mortar and flat slabs, so placed as to overlap and hold down tails of vault stones. Capstones .75–.85 m long with exposed face of .45 m.

Beam holes about .15 m in diameter at either end of Room 2, .40 m from end walls in course below spring of vault. Other beam holes .50 m from ends of room in course below small offset beneath capstones, and at 1 m from ends of room in small offset course.

Good example of faulty construction practice of Maya in building vault with semifinished exterior masonry

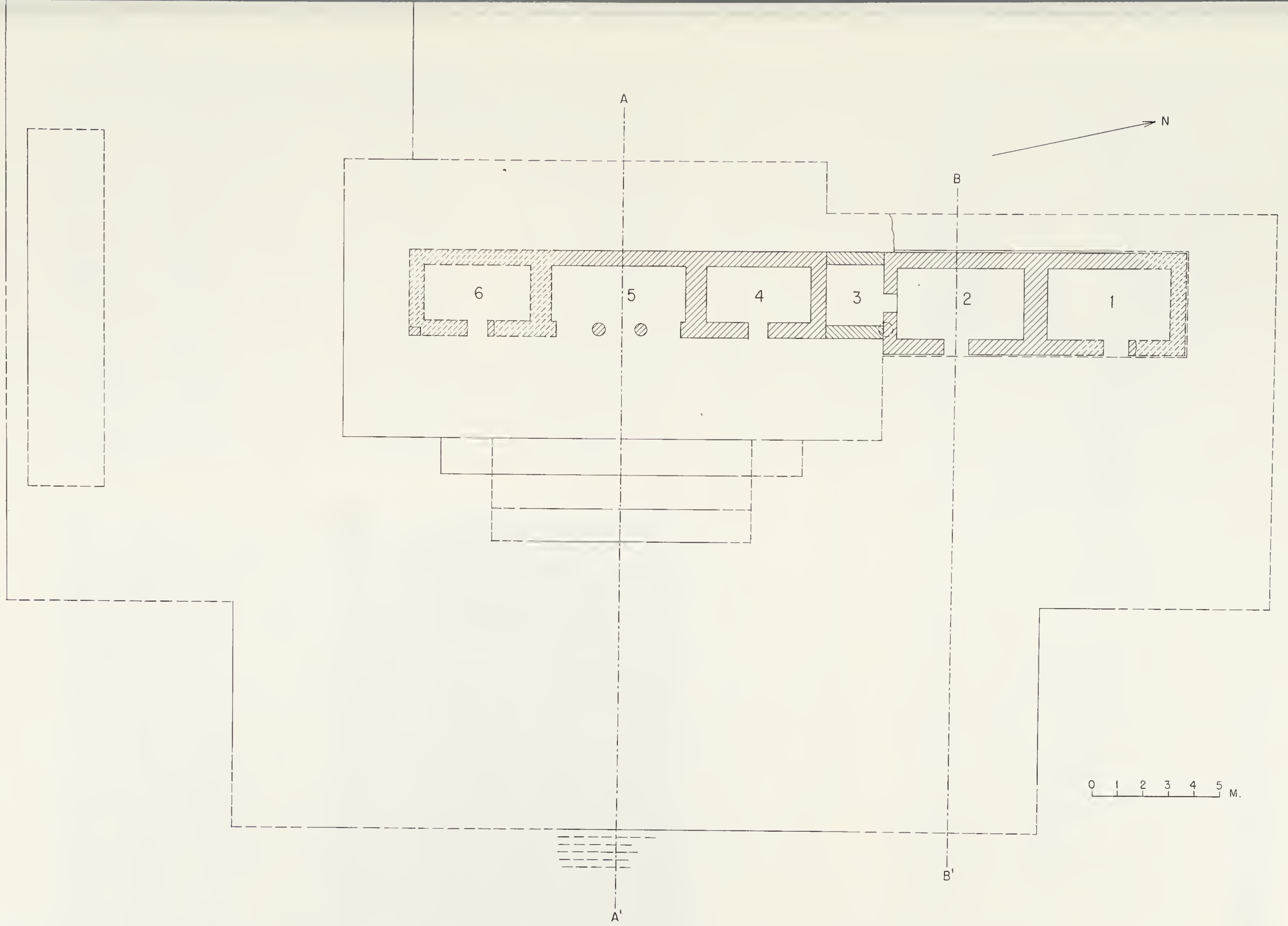


Figure 138. Sabacche, Structure 5. Plan of building and substructural platform.

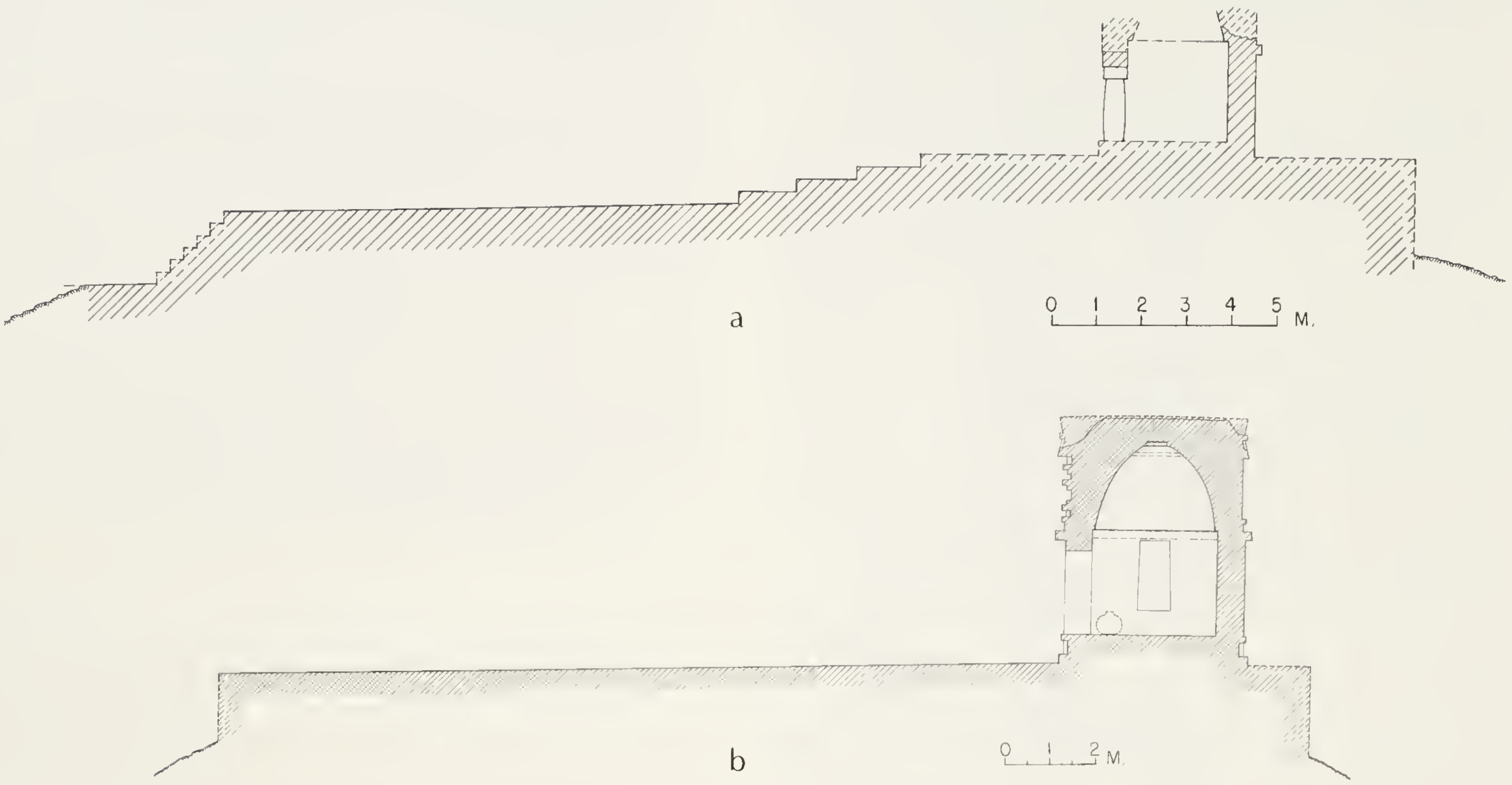


Figure 139. Sabacche, Structure 5: a, section A–A′ through South Wing; b, section B–B′ through North Wing.

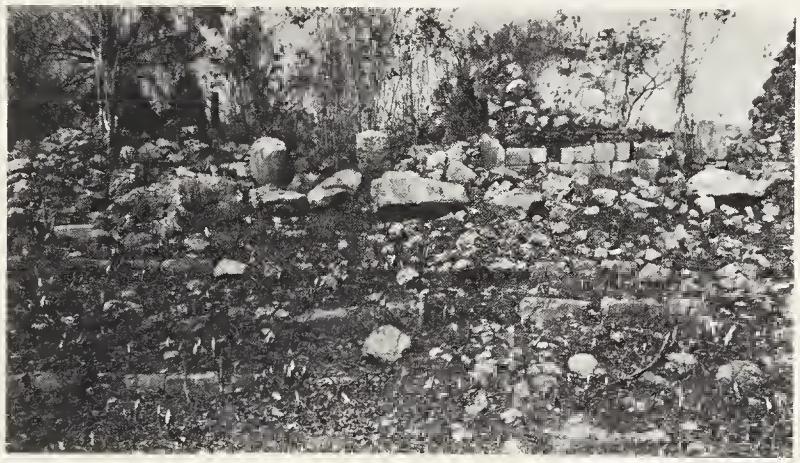


Figure 140. Sabacche, Structure 5, South Wing. Stairway to upper platform and remains of Rooms 4–6, looking west.

backing that rises nearly vertically over approximate center of lower walls, with upper facade subsequently built against this face without bonding or any tie between the two (fig. 147). Line of cleavage thus formed between masonry of upper facade and vault masonry. Many instances noted where upper facade has fallen but vault remains standing (e.g., see Intermediate Chamber, below).

Moldings. Highly decorated medial molding at front of wing (figs. 142, 150). Cornerstone of primary member formed of three spools (fig. 149a); other spools are single stones with deep tenons. Cornerstone of second member carved on two faces, and third member cornerstone, which is missing, presumed to have been carved on two faces.

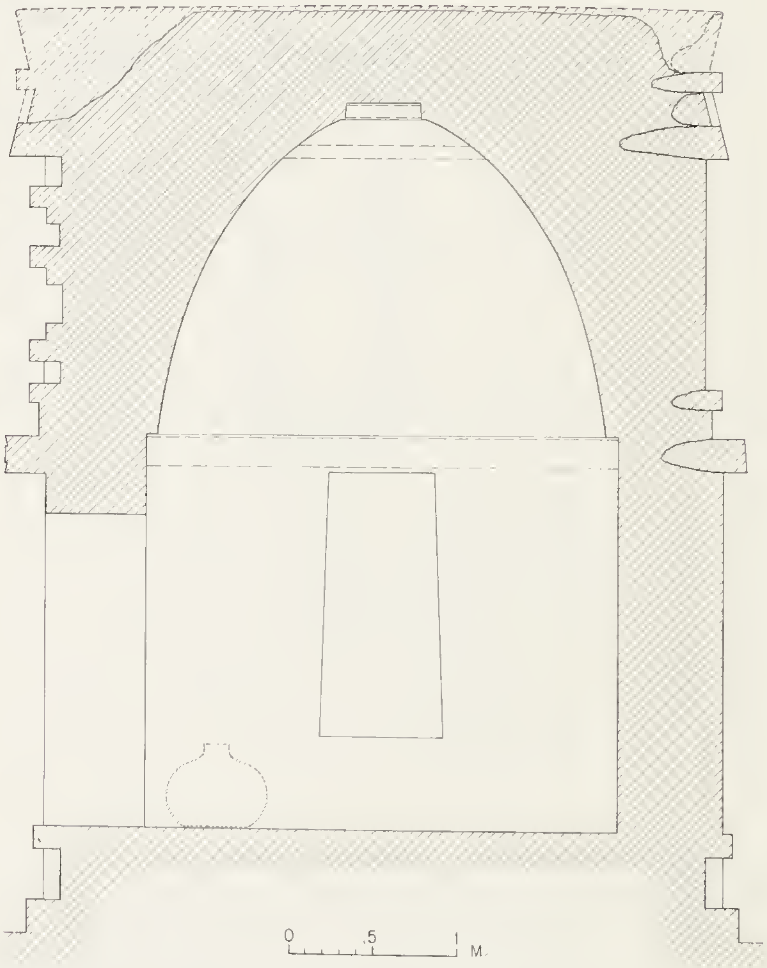


Figure 141. Sabacche, Structure 5, North Wing. Section through Room 2.

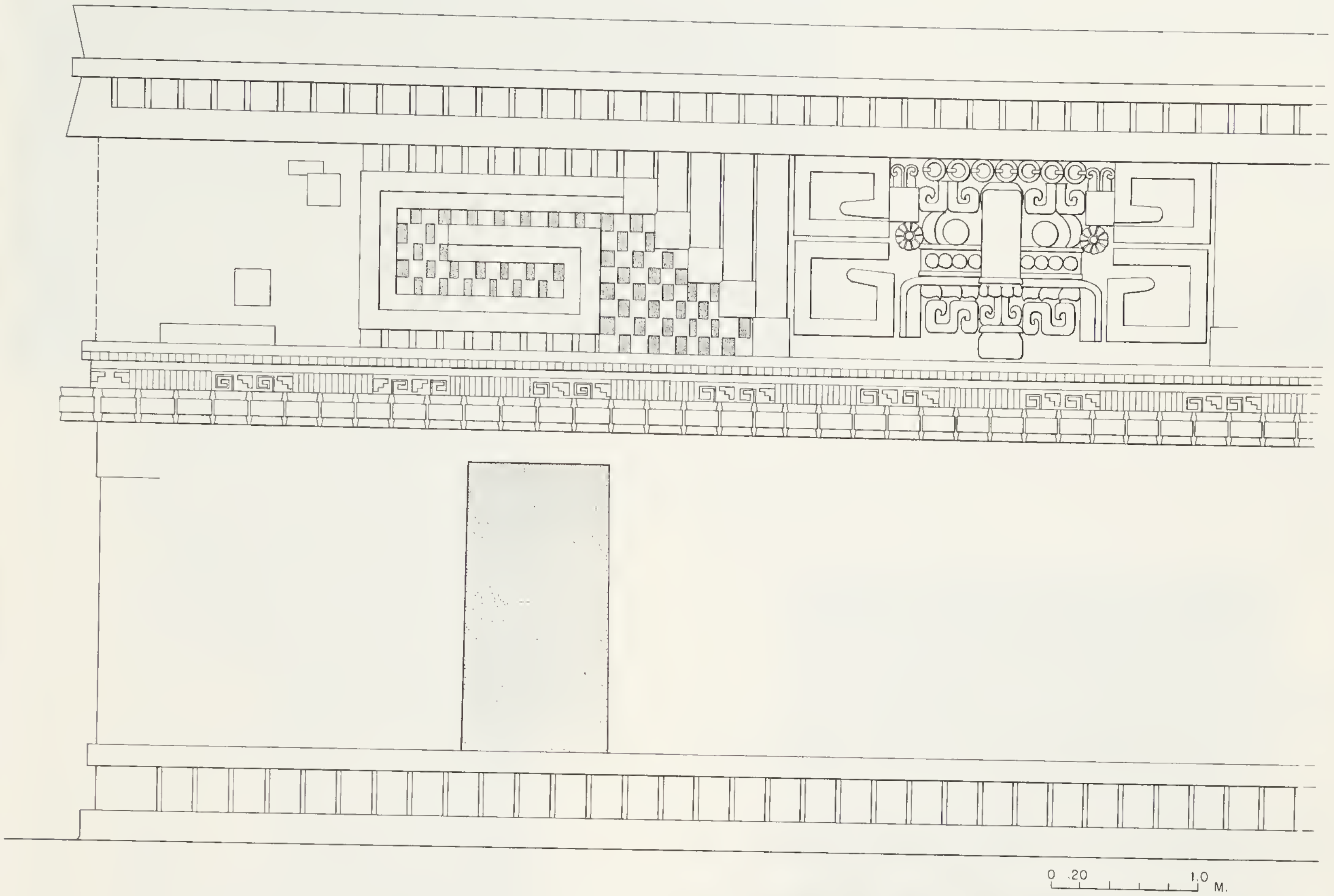
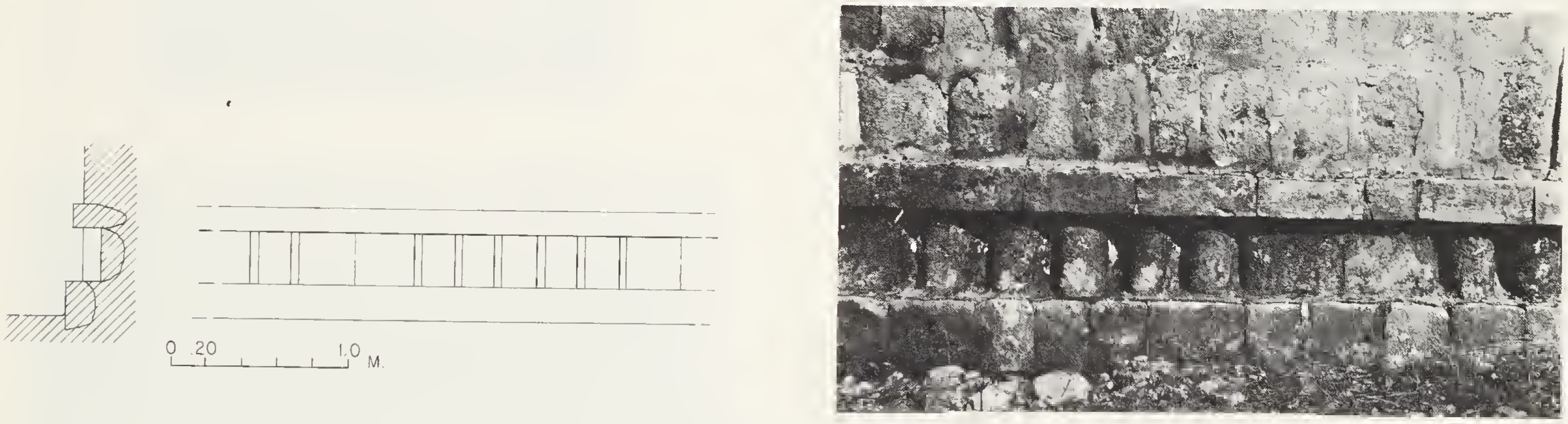


Figure 142. Sabacche, Structure 5, North Wing. Restored elevation of east facade (cf. fig. 144b).



a

b

Figure 143. Sabacche, Structure 5, North Wing. Base molding at rear of building: a, section and elevation; b, view from west.

Primary member of medial molding at rear of wing varies from vertical face to very slight batter. Second member carries colonnettes in groups of three separated by plain zone except in middle where five colonnettes occur (fig. 148). Third member plain but with occasional carved stone, like that in third member of medial molding at front of wing.

Cornice molding largely restored (figs. 141, 142). Primary course standing at front and back of wing, but only two colonnettes of second member and fragment of third member at rear. None of coping course in place.

Roof. Much of roof masonry present but none of final upper surface. Construction of usual small flat slabs bedded in mortar. Vague plaster stratum between capstones and masonry above.

Decoration (see Hissink 1934, pp. 51, 97). Mask with tightly curled snout (fig. 149b) at center of upper zone of east facade (fig. 142). Fret, step, and colonnette design

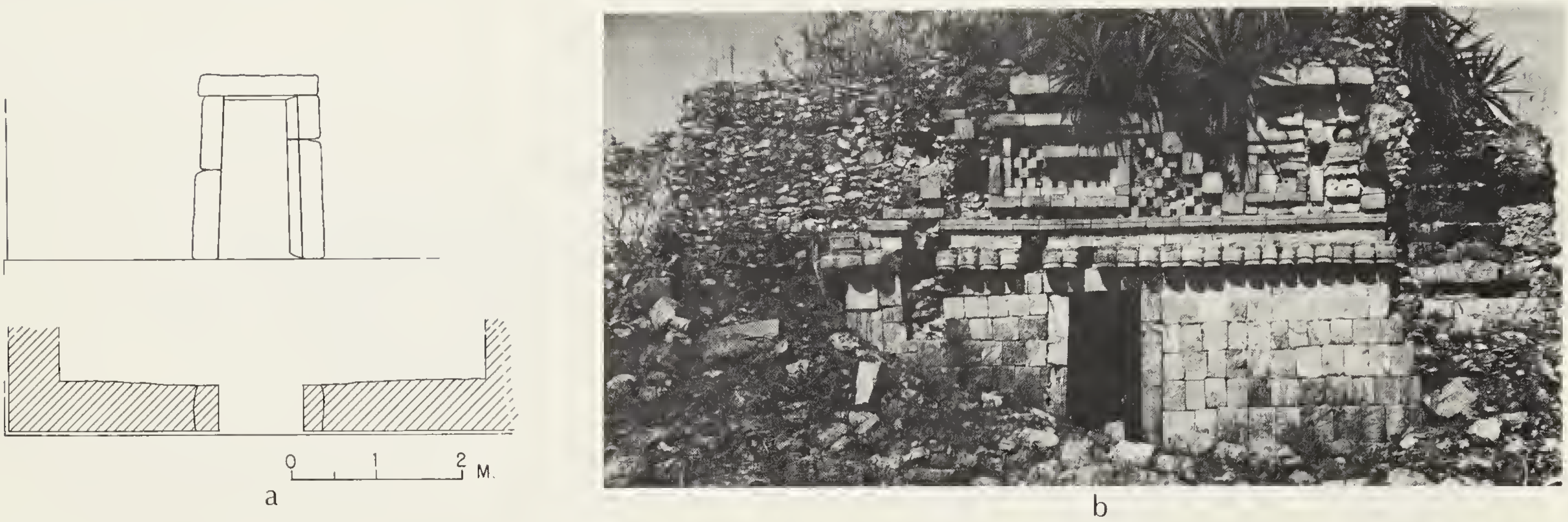


Figure 144. Sabacche, Structure 5, North Wing. Front wall and doorway of Room 2: a, plan and elevation; b, view from east, also showing fallen facade and rough vault masonry of Room 3.

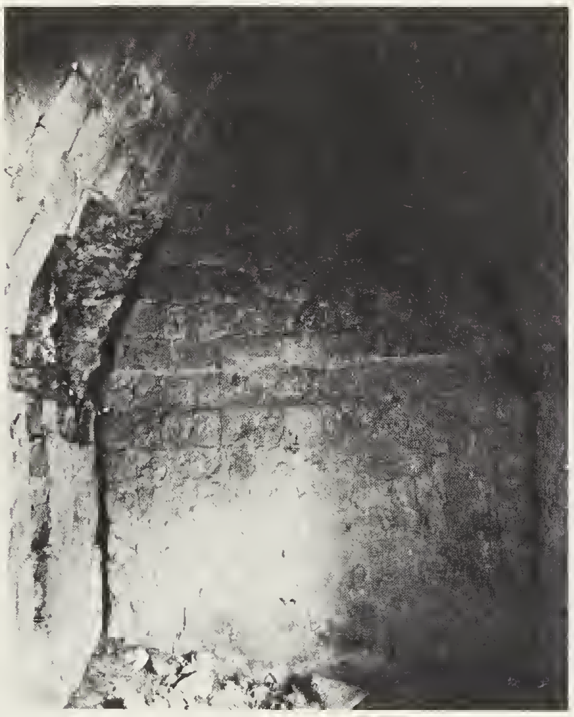


Figure 145. Sabacche, Structure 5, North Wing. Interior of Room 2, looking north.

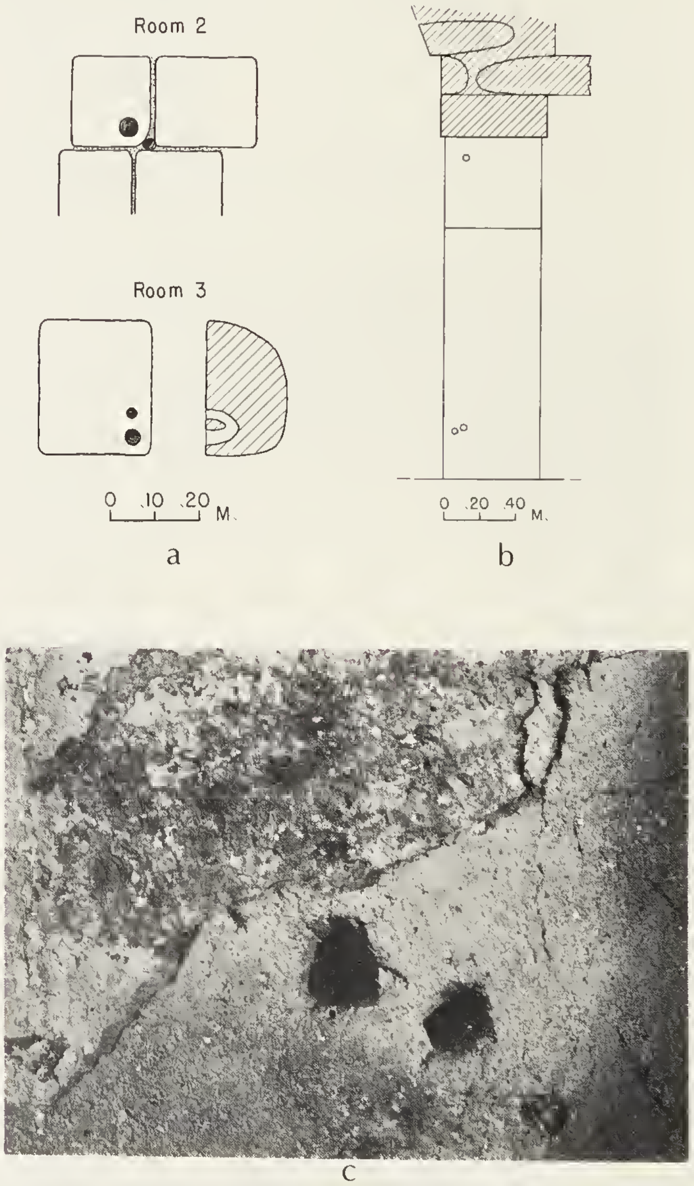


Figure 146. Sabacche, Structure 5, North Wing. Wall depressions: a, cordholders; b, elevation of doorjamb with rod sockets, and section of lintel, primary course of medial molding, and spring course of vault of Room 2; c, cordholder with wall plaster preserved in Room 3.

remains at one side of mask (fig. 150) and presumably repeated in mirror image at other side. Fragment of decoration suggests that step design, possibly leading to corner mask, remains at left of fret (fig. 142).

Imprint of red hand on outer face of lintel over doorway to Room 2 (see pp. 143, 167, 555).

Painted capstone at center of vault of Room 2. Fine dark blue or black line on gray plaster. Painting too fragmentary to understand, but what may be feathered serpent with head to west along south edge of stone (fig. 151).

INTERMEDIATE CHAMBER (Room 3)

Plan. See figure 138.

Base Molding. Molding at front of building deeply buried and character unknown. At rear there is single

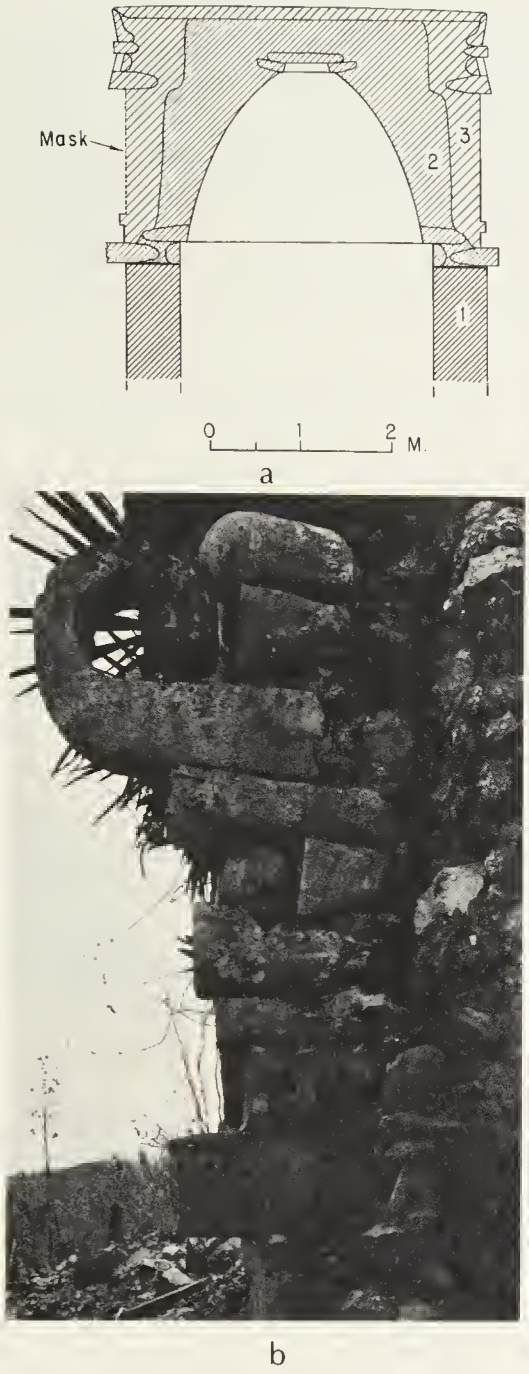


Figure 147. Sabacche, Structure 5, North Wing: a, section showing building stages employed in erection of typical Puuc vaulted building: (1) walls finished with plaster capping at top; (2) primary course of medial molding, top course of interior wall facing, and vault masonry; (3) upper courses of medial molding, upper facade masonry, cornice molding, and final roof cap; lime mortar was probably allowed to age upon completion of each stage; b, upper facade, showing medial molding and mask elements in profile, and line of cleavage between upper facade masonry and vault masonry.

course of stone set flush with wall (fig. 152), and hence no true molding.

Floor. Step up from Room 2 to Room 3 (fig. 141). This made necessary by rise of bedrock below building (fig. 152).

Pottery jar beneath floor level at northeast corner of room (figs. 138, 141). Maler (1895, p. 248) says this jar once contained a burial.

Walls. East and west walls .50 m thick and hence rather light. North and south walls belong to North and South Wings, respectively (see Secondary Construction and Building Sequence, below).

Doorway. See North Wing, above.

Wall Depressions. Tongue variety of cordholder at right of doorway at level top of lintel. Two-hole-in-stone variety (fig. 146) in east wall near northeast corner and at left of doorway one course up from floor.

Vault and Beams. Construction of vault like those in North Wing (see above) but narrower and slightly lower. Entire outside upper facade of Room 3 has fallen, exposing backing of vault masonry (fig. 144b), but vault standing and in relatively good condition.

Beam holes immediately below spring of vault at either end of room. Holes at south end double, having held two beams.

Moldings. Third member of medial molding on rear wall of North Wing (fig. 148) carried across back wall of Room 3 (fig. 152). No other moldings remain.

SOUTH WING (Rooms 4–6)

Plan. See figure 138.

Section. See figure 139a.

Base Molding. Deeply buried at front of building. Base course at northwest corner of wing set flush with wall and not true molding (fig. 152).

Floor. At same level as floor of Room 3.

Walls. Similar to those of North Wing but inner-wall facing slightly better dressed. Outer corners of usual large upright blocks of stone (fig. 152).

Doorways. Entrances to Rooms 4 and 6 of normal jamb construction and stone lintels.

Typical triple entrance to Room 5 (fig. 138) with two columns (fig. 140) supporting rectangular capitals and stone lintels, very common in Puuc architecture. Column shafts apparently each a single stone, cut with pronounced entasis (fig. 139a).

Vaults. Only few stones remain in place. Probably similar to North Wing but narrower.

Moldings. Three stones of primary course of medial molding in place on rear wall. Rectangular or very slight batter on face (fig. 139a). No other moldings standing.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

West wall of Room 3 secondary to North and South Wings as shown by cornerstones visible at rear of building (fig. 152). Suggestion that vault of Room 3 is secondary to vaults of South Wing because plaster stratum rising from level of medial molding of Room 3 separates the two vault ends (fig. 152).

Cannot be sure of order of building, but likely sequence is the following:

(1) South Wing complete.

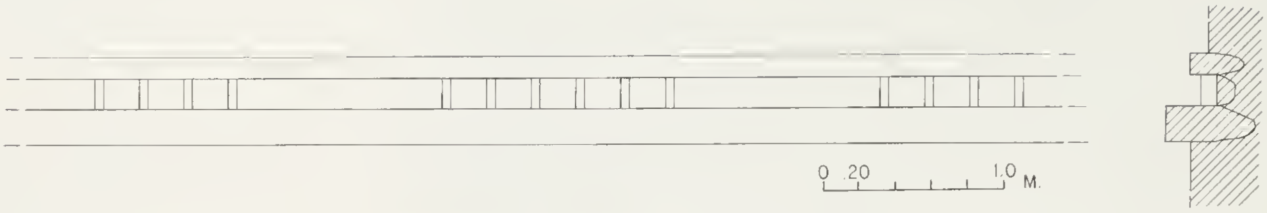


Figure 148. Sabacche, Structure 5, North Wing. Elevation and section of medial molding at rear of building.

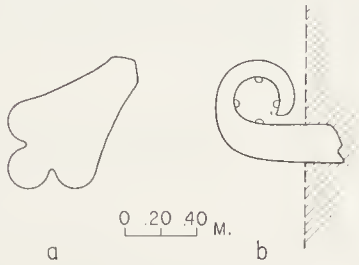


Figure 149. Sabacche, Structure 5, North Wing: a, plan of corner stone of primary member of medial molding at east; b, profile of snout of mask on east facade (cf. fig. 147b).

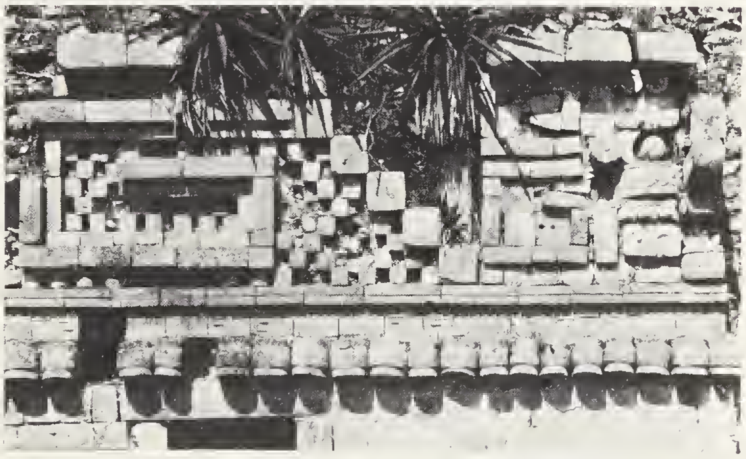


Figure 150. Sabacche, Structure 5, North Wing. View of facade decoration over doorway to Room 2.

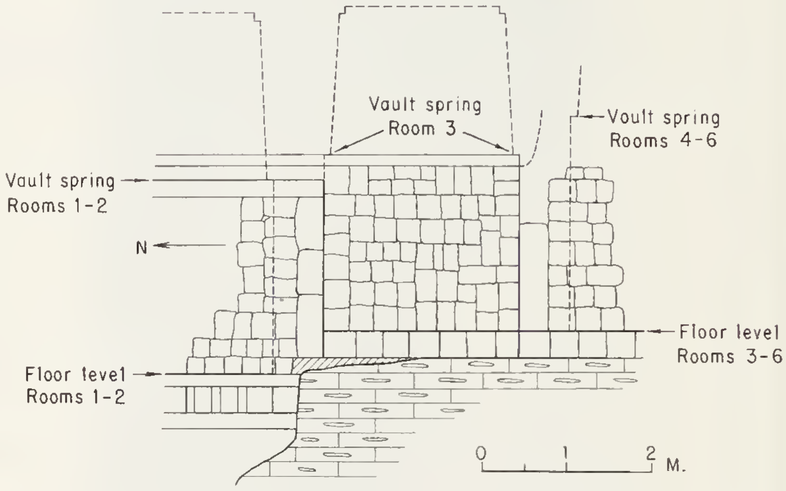


Figure 152. Sabacche, Structure 5. Elevation of rear wall, showing underlying bedrock (in section), necessitating rise in floor level of Rooms 3–6, and joints in masonry between Rooms 2 and 3 and Rooms 3 and 4, indicating building sequence.

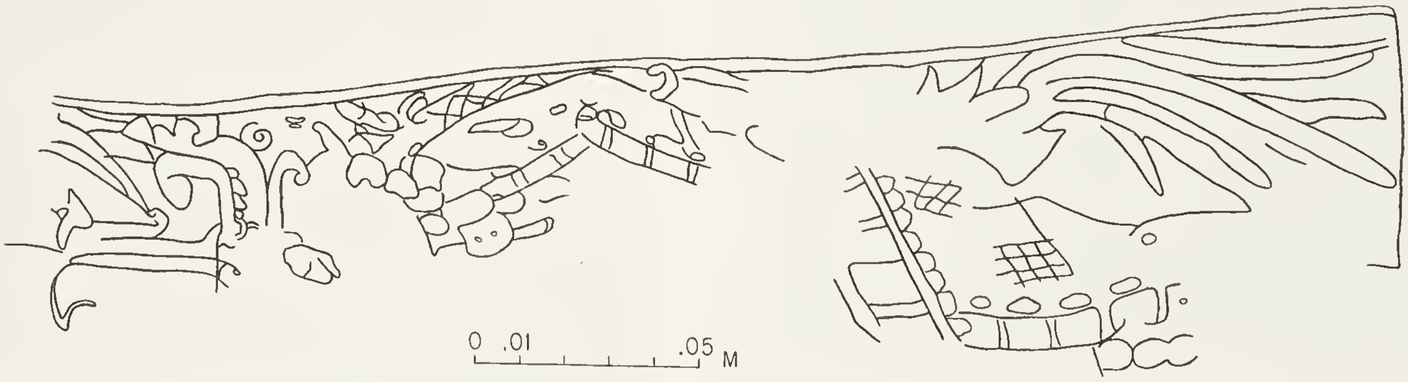


Figure 151. Sabacche, Structure 5, North Wing. Fragmentary painting on central capstone of vault of Room 2.

(2) North Wing walls to height of medial molding. Base courses and floor of Room 3.
(3) Room 3 walls to height of medial molding. Ripping out of northern upper facade of South Wing.
(4) Vaults of North Wing and Room 3.
(5) Upper facades and roof of North Wing and Room 3.

Structure 6

This structure represents a type that was observed in considerable numbers at Sabacche and that undoubtedly is widespread in the Puuc region. Such structures are found on hilltops, as hillside terraces, and, as in the case of the present example, on relatively level ground. They vary in size, in orientation, and in quality of construction. The chultun and low masonry walls on top of the platform or terrace are diagnostic of the type.

These structures are assumed to be dwellings, but no excavation was undertaken at Structure 6 or at any similar structure. The present example is probably atypical in that the house has masonry walls that may have stood to roof height. Low masonry foundation walls that presumably supported walls of perishable materials are believed to be typical (see Labna, Str. 1, Southwest Wing). Structure 6 is hesitantly identified as an upper-class dwelling.

A number of stone basins *(pilas)* or metates were found at the northwest corner of the structure.

PLAN AND SECTION

See figures 153, 154.

SUBSTRUCTURE

Stairway. Little stairway of three steps at west side of platform. Construction not recorded but undoubtedly single course of stone forms both tread and riser of each step.

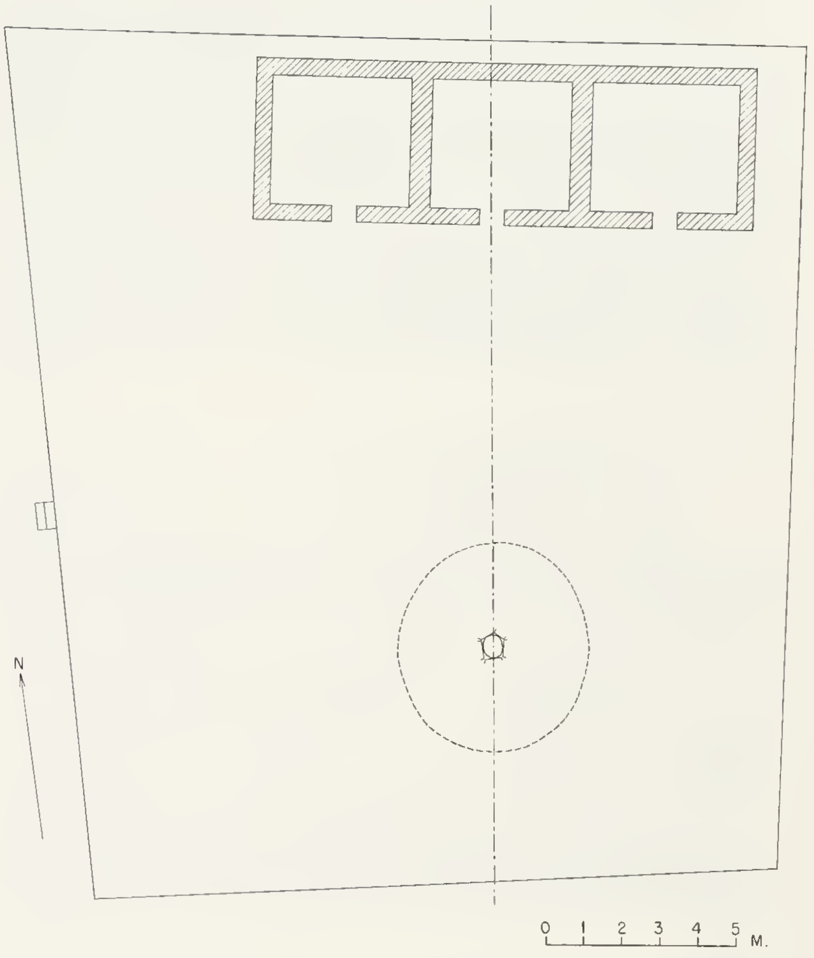


Figure 153. Sabacche. Plan of Structure 6.

Construction. Loose stone fill retained by walls of large roughly shaped stone (fig. 155). One nicely cut and faced cornerstone at southwest corner and few other dressed stones, but quite rare. Rough stone in walls runs up to 1.30 m in length. No mortar or plaster now visible. Suppose surface of platform carried plaster floor and sloped down to chultun entrance, but too eroded and irregular to be certain.

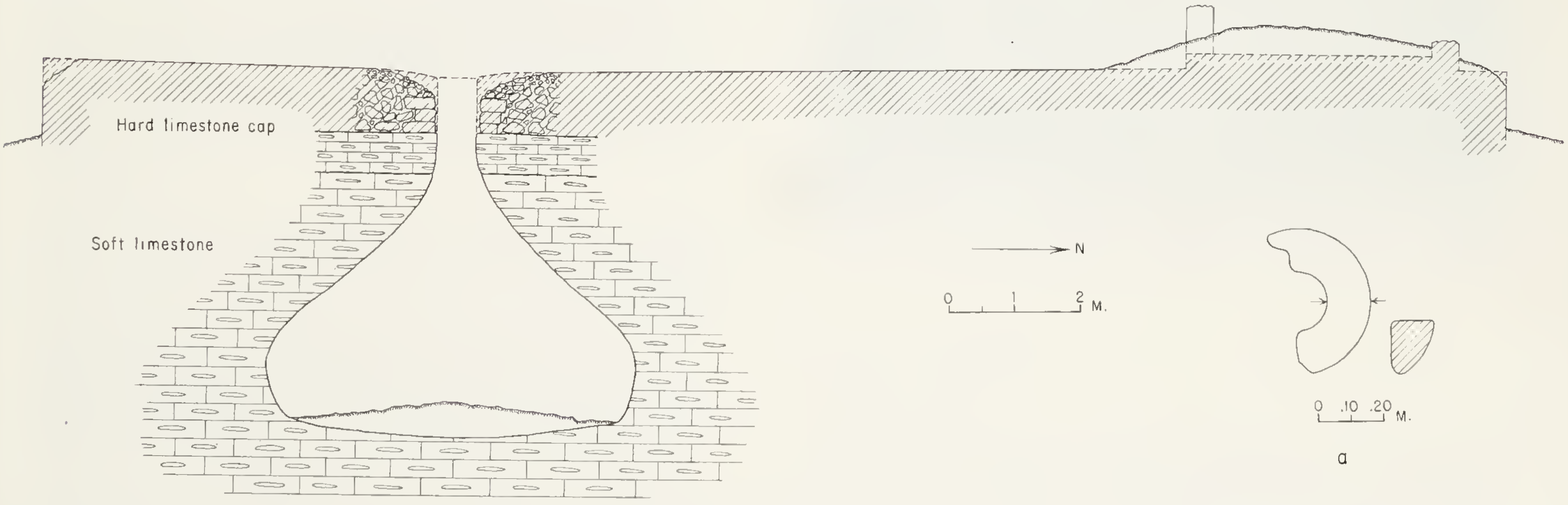


Figure 154. Sabacche, Structure 6. Section through chultun and building: a, fragment of stone collar found in chultun and presumably from mouth of cistern.

Upper part of neck of chultun is of masonry, lower part cut through hard natural limestone cap (fig. 154). Below hard cap stone is softer, and chamber probably formed by excavation of disintegrated limestone, or sascab (see Littmann 1958). Great deal of plaster on walls of chamber; averages .05–.10 m thick, at places much thicker.

Fragment of stone ring or collar (fig. 154a) in debris at bottom of chultun. Collar presumably fitted into or around opening to chultun.

SUPERSTRUCTURE

Plan. See figure 153.

Section. See figure 154.

Construction. Assume there was a step up to floor of building, but hidden beneath debris. Walls about .40 m thick and standing to height of one or two courses of normal faced stone. Doorways .65 m wide. Jamb stones about .37 m wide by .75 m high by .20 m thick. Fallen stones in doorways may be lintels but probably jamb stones.

Debris in building stands to height of only about 1 m at highest. Too much debris for perishable wall construction, but rather little for masonry walls and beam and mortar roof. Believe masonry walls and thatch roof best guess.

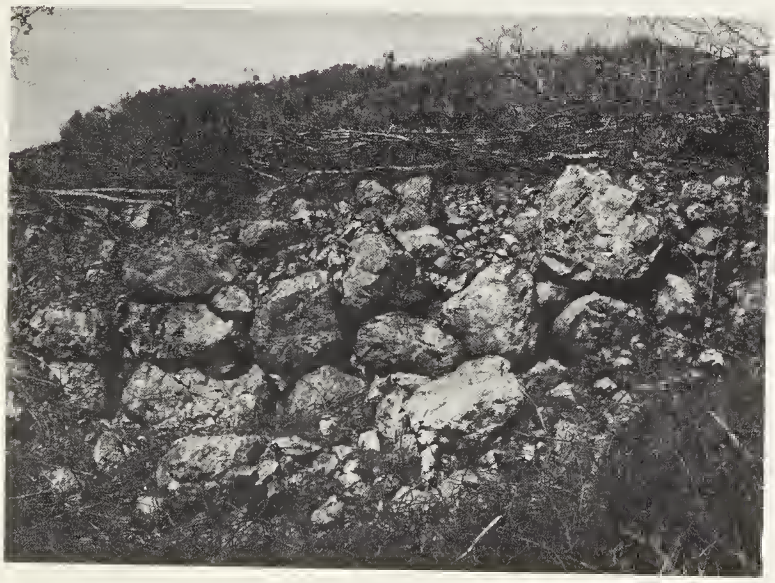


Figure 155. Sabacche, Structure 6. Rough masonry of platform wall.

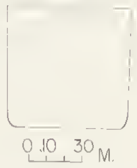


Figure 156. Sabacche. Altar 1, profile.

Temple with Lattice-Work Facade

This building, illustrated by Stephens (1843, 2:42), Catherwood (1844, pl. 18), and Spinden (1913, pl. 6:2), was diligently sought for but not found. It is presumed to have fallen.

The structure is described by Stephens (1843) as having "a single doorway, opening into a chamber twenty-five feet [7.62 m] long by ten [3.05 m] wide." Maler (1895, p. 248) says the building faces south.

Illustrations show what appears to be one-room structure with flying facade. Facing stone stripped from lower wall zone but almost surely undecorated. Simple rectangular medial molding that rises over entrance. Plain upper wall zone that may or may not have been topped by molding. Perforated flying facade divided into two horizontal zones by characteristic three-member molding of apron member at bottom, rectangular member in middle, and reverse apron or bevel at top. Five windows separated by panels of lattice design in lower zone of flying facade. Possibly four windows, but more likely six, separated by lattice design in upper zone. Flying facade crowned by cornice molding, two lower elements of which are like those of molding below. Topmost element fallen, but probably typical overhanging coping course.

May have been altar in front of building (see Monuments, below).

MISCELLANEOUS NOTES

Building just west of road to Labna and about 500 m south of ranch of Sabacche, completely fallen. Had engaged column with base or capital or both at corner.

Several fallen buildings southeast of Structure 5. One example of columnar triple entrance.

Badly ruined group of structures on road to Kom and about 500 m southeast of Structure 1.

Good number of large circular pits with walls of large rough stone, apparently dry laid. Purpose unknown.

Stephens (1843, 2:45–46) mentions but does not illustrate two buildings about 2 km from Structure 5.

MONUMENTS

ALTARS

Altar 1. Plain (fig. 156). Diameter at top .70 m.

At center of Court of Structure 1 (see fig. 132). Tipped on side and broken, but apparently approximately *in situ.*

Drum altar well dressed on top, bottom, and sides.

Altar 2. Maler (1895, p. 248) reports what seems to have been an altar before Temple with Lattice-Work Facade.

Muluchtzekel

ETYMOLOGY

muluch, pile or mound of stone (see Martinez 1929, p. 643); *tzekel,* rocky or infertile land (ibid., p. 260). Translation: hillock of rocky soil or bedrock (Roys, personal communication). Variant spelling: Muluchtsekal, Mulultsekal, Muluidsekal, Mulush-Sekal. Other names: Muluch Seca, Muluc Seca, Muloot-Seca. Local inhabitants are most apt to use Muluch Seca.

SITUATION

Central Group about 3.5 km north of the ranch of Sabacche and about 6 km south of Tabi hacienda (see fig. 2).

TOPOGRAPHY

Not recorded. Memory is of Central and West Groups in rolling terrain, less sharply broken than much of Puuc region; West Group in low hills.

WATER SUPPLY

Nearest known permanent natural water supply at Chac and Loltun, each about 10 km away. No chultuns observed but undoubtedly present. Nearest wells at Sabacche and Tabi. See Sabacche, above.

MAP

None but sketch map given here (fig. 2).

SIZE

Four groups known, three of them shown on map (fig. 2). Central Group lies both sides of Tabi-Sabacche road; North Group on west side road undetermined distance from Central Group; South Group about 1 km south-southwest of Central Group; West Group about 500 m west-northwest of Central Group. Site inadequately explored and may have many more structures than those in known groups. Probably a large site.

CIVIC PLAN

Groups of structures widely distributed, and intervening areas unexplored. Arrangement of structures within groups unknown but for orderly, relatively compact plan of West Group (see below).

Orientation. Doorway with hieroglyphic jambs in Central Group faces 19° south of east. No accurate sightings on other buildings.

REFERENCES

Case 1911, p. 208, illustration.
Proskouriakoff 1950, p. 169.

CENTRAL GROUP

Several small structures, badly ruined, just west of Tabi-Sabacche road. Other buildings seen among trees across road but not visited. No large structures observed. No formal plan of group apparent.

Small amount of masonry visible seems characteristic of region. Structure with Hieroglyphic Jambs at west of road feature of main interest. Carved stone of uncertain function near this building (see Miscellaneous Sculpture, below).

Structure with Hieroglyphic Jambs

(Structure 1)

Small mound about 10 by 10 by 3 m high with remains of doorway at east.

SUPERSTRUCTURE

Doorway. Lowest stones of jambs with glyphic panels on front faces are standing above simple base molding (fig. 157a, b). Three stones with glyphs (fig. 157c) and plain lintel in front of doorway. These may be reassembled as shown in figure 158, but restoration by no means certain. Quite possible that jambs are made of reused stones.

SOUTH GROUP

Appears to be fairly extensive group with two principal structures. First, or western, 50–100 m east of road; second, or eastern, some 200 m further southeast (fig. 2).

Western Structure

Possibly 50 m long. Badly fallen but apparently faced south. Appears to consist of two stories with large solid central core probably planned for third story that was never built. Stairway to second story may have passed over vault, but not certain.

SUPERSTRUCTURE

Doorways. Large stone lintels and door jambs. Second story central doorway at south still standing (fig. 159).

Eastern Structure

SUPERSTRUCTURE

Plan. See figure 160. Sketched by eye without measurement or compass bearing. Unusual plan. Vaults of small rooms run transversely to long axis of building. Staircase with vaulted passage beneath it rises to what appears to be solid platform to support second story.

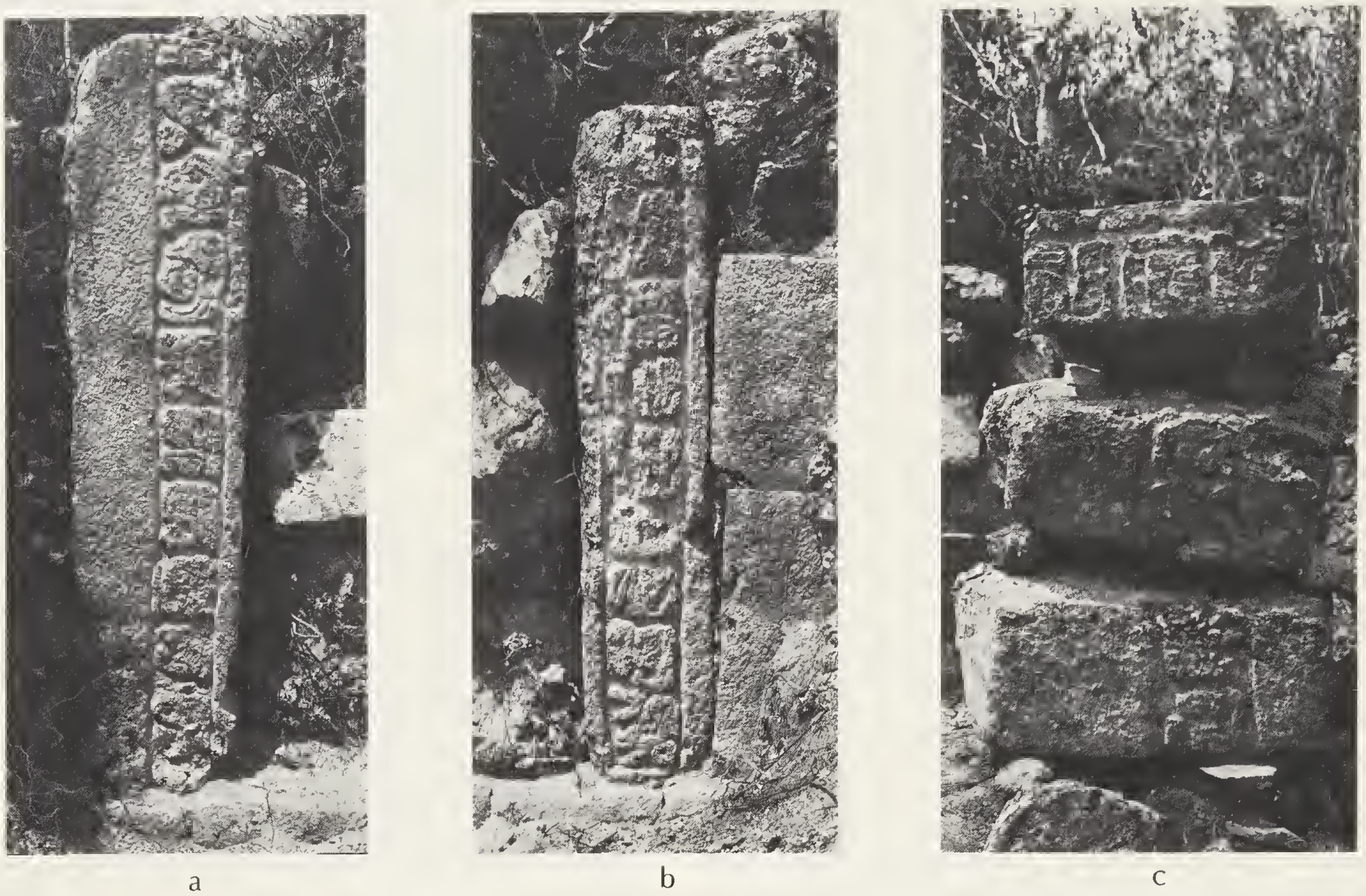


Figure 157. Muluchtzekel, Structure with Hieroglyphic Jambs: a, left lower jamb stone; b, right lower jamb stone; c, fallen stones.

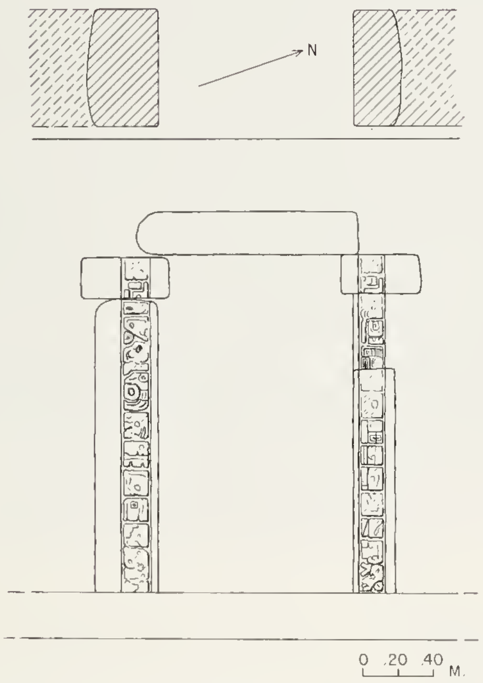


Figure 158. Muluchtzekel, Structure with Hieroglyphic Jambs. Plan and restored elevation of doorway.

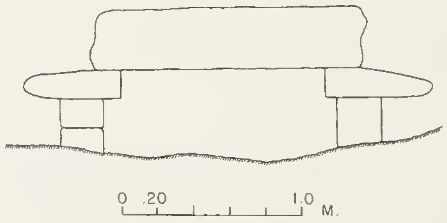


Figure 159. Muluchtzekel, South Group, Western Structure. Detail of standing, partly buried doorway.

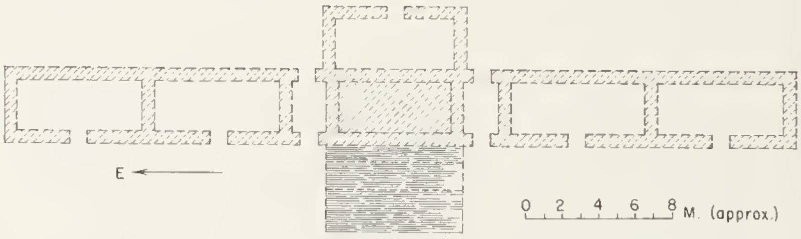


Figure 160. Muluchtzekel, South Group. Sketch plan of Eastern Structure.

Construction. Stone work on particularly large scale. Great lintels over doorways, large, semispecialized vault stones, huge cornerstones over 1 m on each face in primary member of medial molding.

Extreme case of finished masonry backing to vaults (cf. figs. 113b, 144b). Face rises vertically, well-laid masonry, probably was roughly plastered. Practically all of upper facade has fallen away from smooth face of vault masonry.

Fragment of medial molding in position on south side of west wing at juncture with projecting room (fig. 161). Primary member slightly beveled, middle member vertical, upper member rectangular and overhanging.

WEST GROUP

Well-planned group of four structures around artificially leveled court.

PLAN

See figure 162. Sketch plan.

CONSTRUCTION

Entire group apparently raised slightly above natural ground level by terracing.

Eastern mound about 8 m high. Completely fallen mass of loose stone with no standing walls visible.

Northern Structure

Pyramid temple approached by low terrace about 1 m high. Pyramidal substructure probably 10 m high. Staircases of terrace and of pyramid built of large well-cut stones possibly 1 m long.

SUPERSTRUCTURE

Plan. See figure 162. Sketched by eye. Typical two-room temple building with parallel vaults, single interior doorway, and probably single outer doorway. Rooms rather narrow, about 1.75 m.

Construction. Medial wall with vault soffits above still standing, also ends of vaults, but front and rear walls fallen. Medial wall about .80 m thick. Doorjambs of cornerstone and wall-stone construction with three to four vertical rows of stone. Apparently two parallel stones to form lintel, front one in position, other gone. Vault stone rather small and not much specialized stone. Offset course beneath capstones. Simple rectangular medial molding.

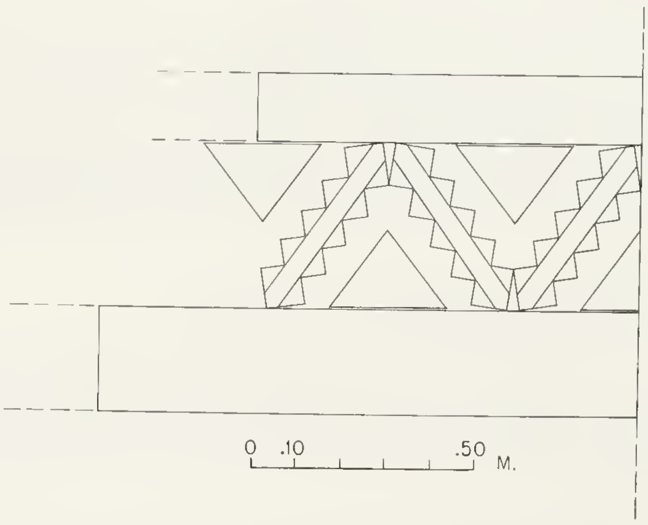


Figure 161. Muluchtzekel, South Group, Eastern Structure. Detail of medial molding.

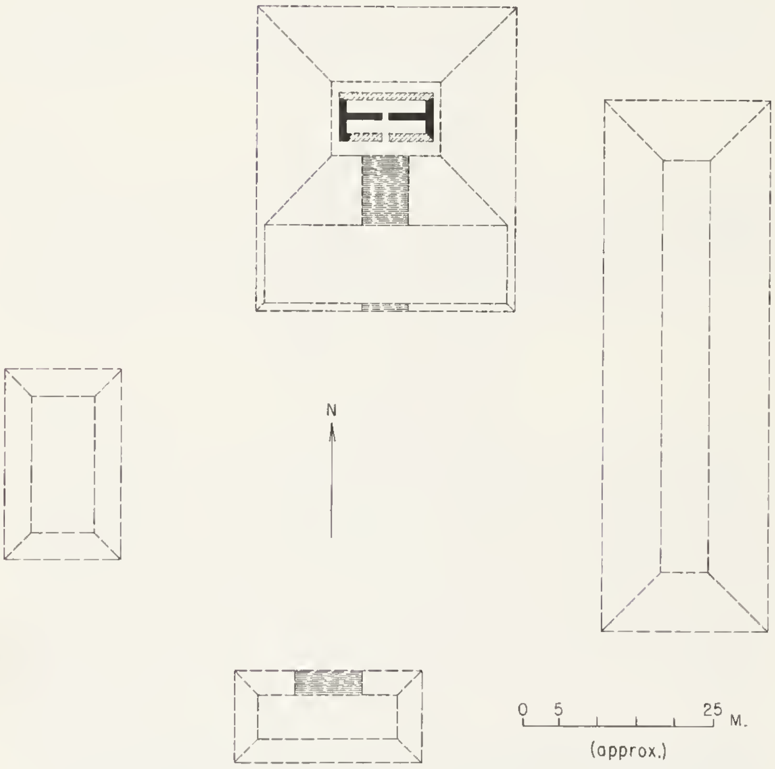


Figure 162. Muluchtzekel. Sketch plan of West Group.

MISCELLANEOUS NOTES

Masonry in North Group exhibits some large well-cut stone (cf. South Group).

Building illustrated by Case (1911, p. 208) not seen. May or may not be standing, or may be wrong identification of site.

MISCELLANEOUS SCULPTURE

M1. Carved stone panel showing human figure with subsidiary figure (fig. 163; and see Proskouriakoff 1950, fig. 104c). Maximum length of stone 1.40 m, thickness .32 m.

Found on southern talus slope of Structure with Hieroglyphic Jambs in Central Group. Fallen and not *in situ.*

Well faced on sides and partly faced on back. Base considerably eroded. Stone broken across middle. First reported as stela and so published by Morley (1937–38, 4:262, 375). Might equally well be wall panel. Rather narrow for lintel and low for door jamb, but might have been either. For further comment, see Proskouriakoff 1950, p. 169.

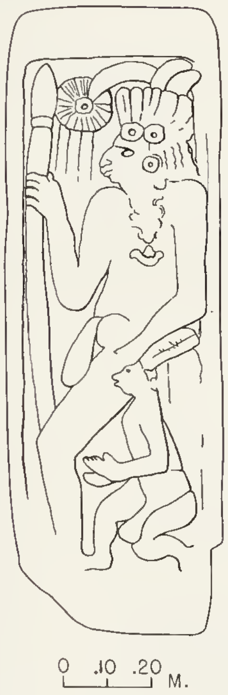


Figure 163. Muluchtzekel. Miscellaneous sculpture, M1, bas-relief of human figure with spear and subsidiary figure.

Other Sites

X-Kukican
(Skokikan)

Approximately 12 km south of Oxkutzcab.

Site first mentioned briefly by Mercer (1896, p. 143). In recent years (1965–69) the ruins have been explored and investigated by the University of Alabama and the Instituto Yucateco de Antropologia e Historia, but little has been published concerning those investigations. Judging by one brief statement (Lowe 1970, p. 512) on that work and by an unpublished map and manuscript kindly supplied me by Dr. John W. Cottier, X-Kukican is a good-sized site of at least three, and probably more, major groups connected to one another by causeways and lying within an area of about 1 km north-south by .4 km east-west. Apparently there is a considerable amount of the early style of architecture like that seen at Oxkintok (see p. 281 ff.), for the most part badly fallen, and a good representation of buildings in the classic Puuc tradition. There also seem to be monuments, whether sculptured or not I do not know. The plan of the site reminds me in some respects of the ruins of Oxkintok (ibid.), but on a smaller scale.

Akil

Town on railroad 11 km southeast of Oxkutzcab.

Akil is an old settlement of pre-Spanish origin in the ancient province of Mani, or Tutul Xiu (see Roys 1957, p. 74). There are mounds in the village and quantities of ancient building stone in Colonial walls and buildings.

REFERENCE

Stephens 1843, 2:249–250.

San Felipe, near Tekax

Railroad station of San Felipe short distance northwest of Tekax.

Architectural remains.

REFERENCE

Marquina et al. 1939, p. 282.

2 · The Great Cities

What I am calling the Great Cities—Sayil, Kabah, and Uxmal—are a chain of sites that lie on an approximate northwest-southeast line running northward from the Labna region through the heart of the Yucatan Ruins (see frontispiece). These cities, as they are now known, are much larger than the ruins I have described above and are larger than any we shall meet, with one or two possible exceptions that will be mentioned. It should be noted, however, that the Great Cities are relatively well explored, and it is entirely possible that with adequate exploration some other sites may turn out to be of comparable size.

The ruins of Sayil lie only a short distance west of those I have already described and are the southernmost of the Great Cities.

Sayil

ETYMOLOGY

say or *zay,* leaf-cutting ant; *sayil,* place of the say ants (see Maler 1895, p. 251; Roys 1935, p. 6). Variant spelling: Zayil, Zayi, Sayi, Salli, Sajil, Layil, and possibly Zeye. If the last does in fact refer to this site, it is a truly old place-name (see Roys 1933, p. 82) in contrast to the great majority of currently known names of ruins.

SITUATION

Latitude 20°10.7′ N, longtitude 89°38.8′ W (incorrectly given as longitude 88°38.8′ W in Morley 1937–38, 4:354). Approximately 6 km west-northwest of Labna, 7 km west of Sabacche, and 7 km south of Kabah.

TOPOGRAPHY

Site lies in a valley or basin surrounded by low, but sometimes steep, hills (fig. 164). Floor of valley, which has its long axis north-south, is relatively level, broken only by small hillocks and outcroppings of bedrock.

WATER SUPPLY

No natural water supply. Nearest known permanent natural water supply at Chac (see p. 138) about 4 km distant. Great number of chultuns at site. Nearest modern artificial wells at ranch of Sabacche, about 8 km away, and at hacienda of Santa Ana, some 10 km distant.

MAPS

Abbreviated map published by Brainerd (1958, map 17), which carries wrong scale, is based on map given here (fig. 164).

SIZE

Site contained in area approximately 2 km north-south by 1.5 km east-west, southern end of which lies off map. Principal structures lie along approximate north-south line somewhat over 1 km long near center of site.

CIVIC PLAN

Primary feature is north-south alignment of principal structures which are connected by a system of causeways, terminated at the north by a huge multichambered palace-like building, and at the south by a ball court and smaller palace (fig. 164). Near the center of this system of causeways and buildings, and near the center of the city, is the principal temple (Str. 3B2). Heaviest concentration of nonresidential buildings is in southwest quarter of city with less concentration at northeast.

Considerable use of courtyard arrangement of buildings, courtyards for the most part being isolated one from another, but some instances of contiguous and connecting courts. Tendency to locate structures on low natural rises; fair amount of hilltop and hillside construction (e.g., Strs. 1B1 and 2) mostly off map.

Many small structures that presumably were dwellings are not shown on map. These characteristically rest on low artificial platform with one or more chultuns in and beneath platforms (see Ruppert and Smith 1957, pp. 583–584). Stone basins, or *pilas,* often associated with these structures.

See G. F. Andrews 1975, pp. 357–361, for further discussion.

Orientation. Buildings face in all directions but strong tendency for one axis of each structure to fall somewhat east of north. Orientation probably averages about 14° east of north.

DATES

Proskouriakoff (1950, p. 162) gives a highly tentative date of 9.19.0.0.0 (A.D. 810) to Stela 6 and suggests that Stela 3 and Stela 5 date from early Cycle 10.

There is a radiocarbon date of A.D. 720 ± 60 (Tamers 1969, p. 411) from Structure 2B1. The description reads: "Wood from supporting beam of top portion of 'Palace,' Sayil, Yucatan, Mexico." I take this to mean the specimen came from the Third Story, probably from a lintel. Recent corrections of the radiocarbon time scale (Damon et al. 1974) make this date, rounded off to the nearest decade, A.D. 730 ± 80.

REFERENCES

G.F. Andrews 1975, pp. 357–369.
Blom n.d.
Maler 1895, pp. 251–252, 277–278.
Mariscal 1928, pp. 48, 53–59.
Marquina 1928, pp. 68–69.
Marquina 1951, pp. 745–749.
Pijoan 1946, pp. 451–457.
Proskouriakoff 1946, pl. 14.
Reygadas 1928, pp. 211–216.
Stephens 1843, 2:16–28.

NORTH GROUP

(Structures 1B1–3)

Hilltop and hillside group of buildings that looks south over the city (fig. 164). Probably because of terrain, but possibly to face some important feature of the city, orientation of structures is slightly east of south rather than usual west of south. Buildings look almost directly at principal temple (Str. 3B2) and at platform holding monuments (Str. 4B4).

PLAN

See figure 165.

CONSTRUCTION

Platform supporting Structure 1B1 and terrace carrying Structure 1B2 rest on hilltop. Terraces of Structure 1B3 are lower on hillside. I have no notes on retaining walls of platform and terraces, and it is possible no masonry was visible. Section through Structure 1B2 (fig. 166) shows level of court of Structure 1B1 to be about .50 m below roof of former. Structure 1B2 is at places based directly on bedrock.

Structure 1B1 obviously approached by stairway at south, which is completely fallen, but uncertain whether this stairway and Structure 1B2 were approached by way of terraces of Structure 1B3, where there is small stairway at southwest corner of upper terrace, or more-or-less directly up the hillside.

At least one chultun, now partly collapsed, in court before Structure 1B1 (fig. 165), and another chultun behind that building.

Structure 1B2

(Palace with the Heads)

Only Rooms 4 and 5 in sufficient repair to offer worthwhile architectural detail (fig. 165).

SUPERSTRUCTURE

Plan. See figure 165.

Section. See figure 166.

Elevation. See figure 167. Rooms 4 and 5 only. Partially restored.

Base Molding. Simple two-member molding of well-cut stone (see figs. 166, 167).

Floor. Raised floor in Room 4 (fig. 166) undoubtedly necessitated by steep upward slope of bedrock beneath building.

Walls. Normal in thickness, in slight swell of wall from door jamb to corner of room, in faintly recessed course beneath spring of vault, and in plaster stratum capping walls below medial molding. Outer facing stone fairly well dressed and quite variable in size (figs. 168, 169); inner facing roughly dressed and of average size.

Doorways. Usual narrowing from bottom to top (fig. 167). Jambs of two or three stones (fig. 168). Lintel in Room 4 slightly narrower than jambs (fig. 166).

Wall Openings. Small rectangular wall openings or windows beneath medial molding in front walls of Rooms 4 and 5 (fig. 167).

Wall Depressions and Projections. .Tongue-at-side-of-stone cordholders in inner wall at either side of doorways.

Small stone tenons .10–.15 m long projecting downward at angle of 45° from wall surface located immediately below medial molding. One centered between doorways, other about 1.5 m east of doorway to Room 5 (see figs. 166, 167).

Benches. Bench that fills most of floor space in Room 4 and bench across west end of Room 5 (figs. 165, 166).

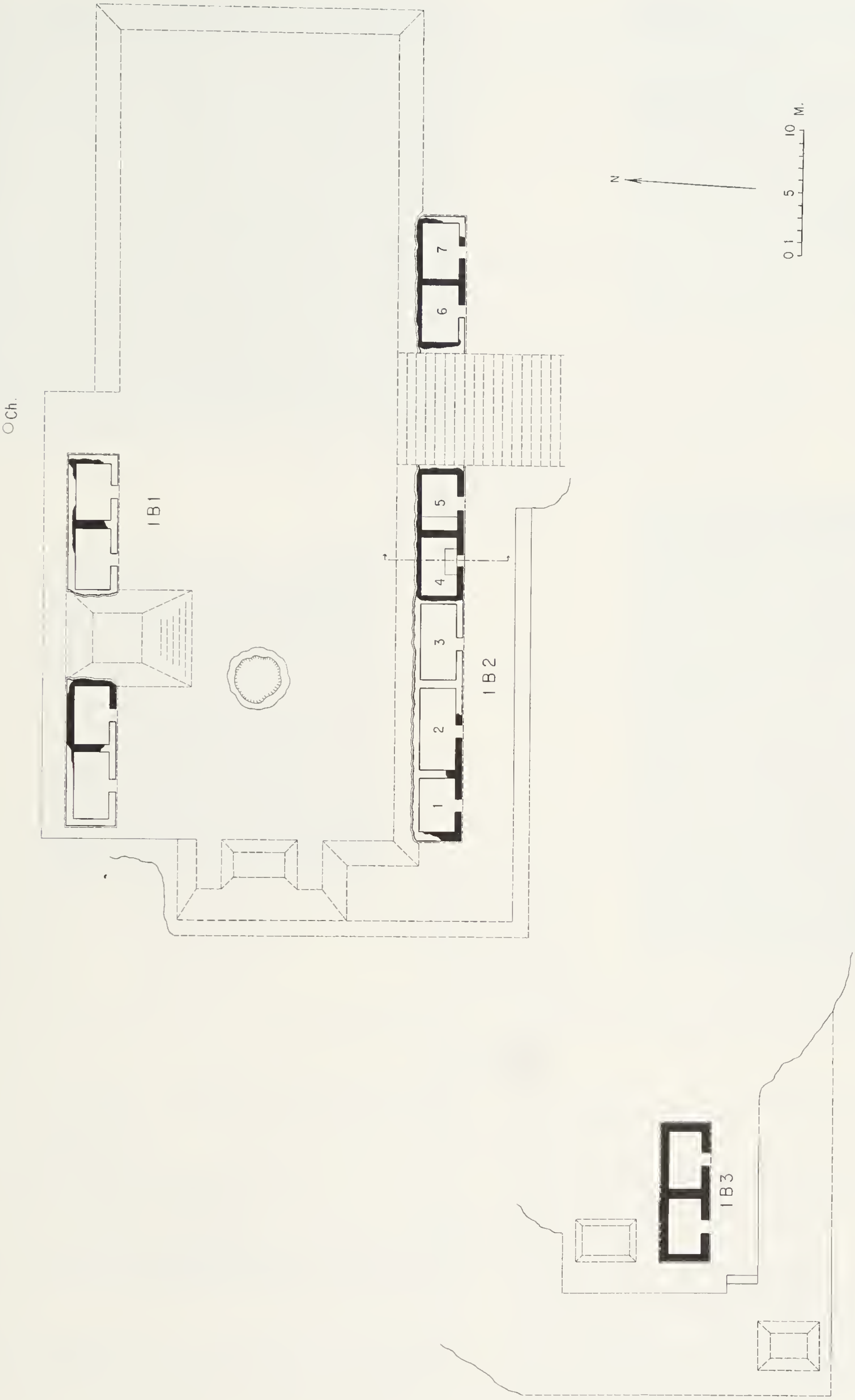


Figure 165. Sayil. Plan of North Group.

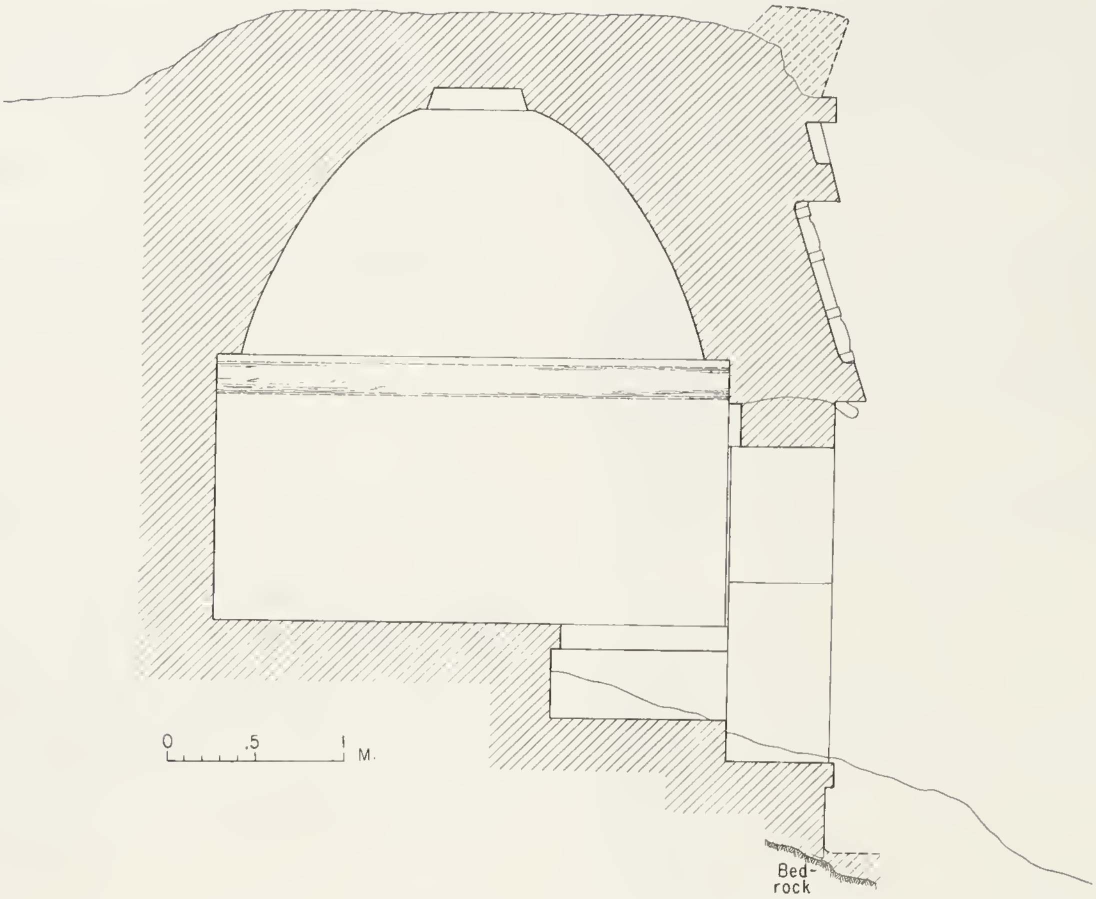


Figure 166. Sayil, Structure 1B2. Section through Room 4.

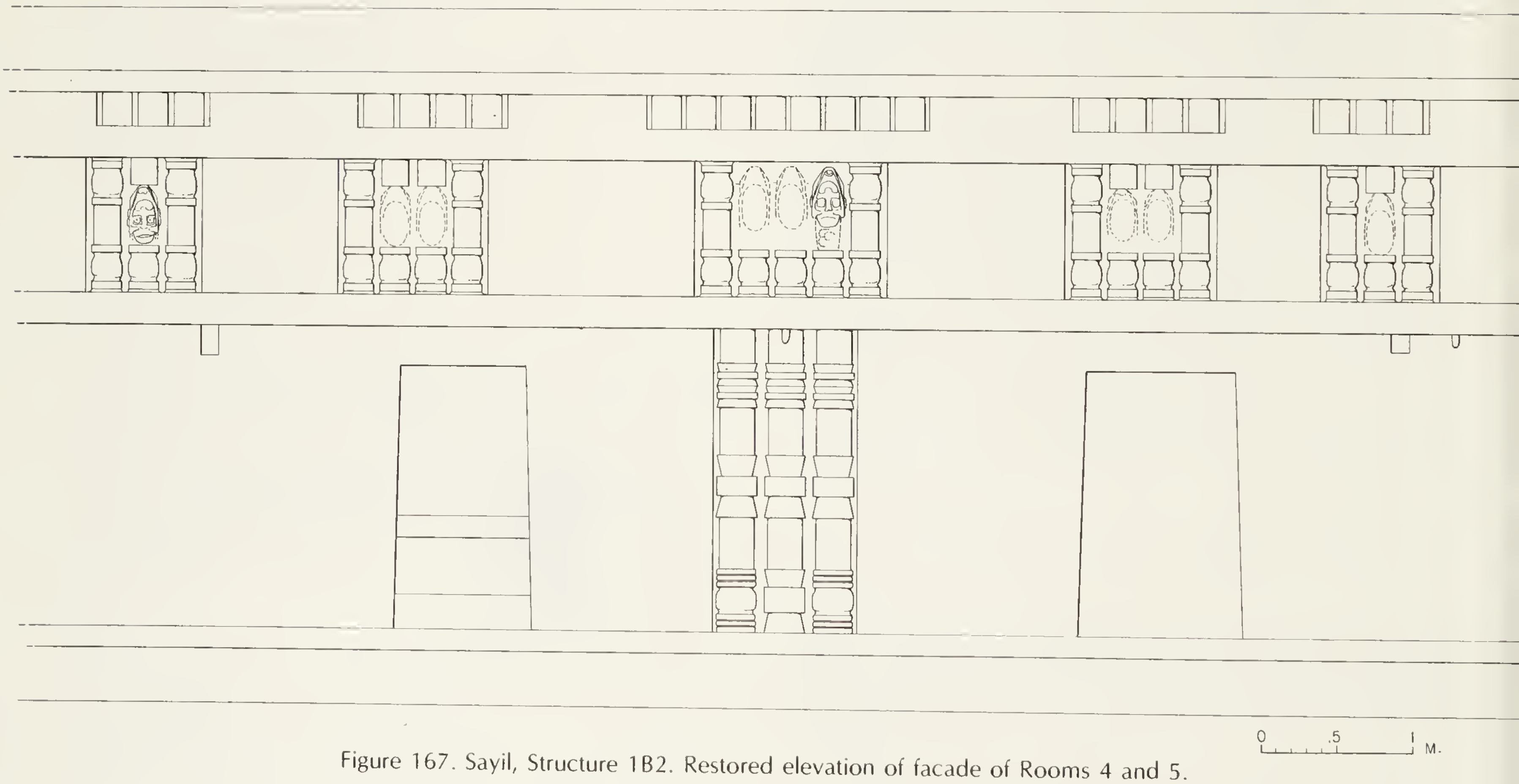


Figure 167. Sayil, Structure 1B2. Restored elevation of facade of Rooms 4 and 5.

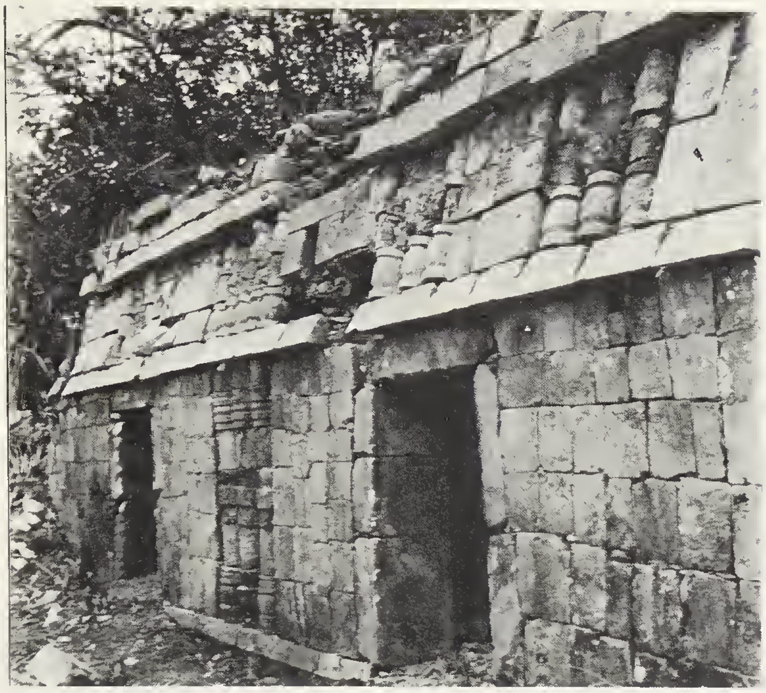


Figure 168. Sayil, Structure 1B2. Facade and doorways to Rooms 4 and 5, looking northwest.

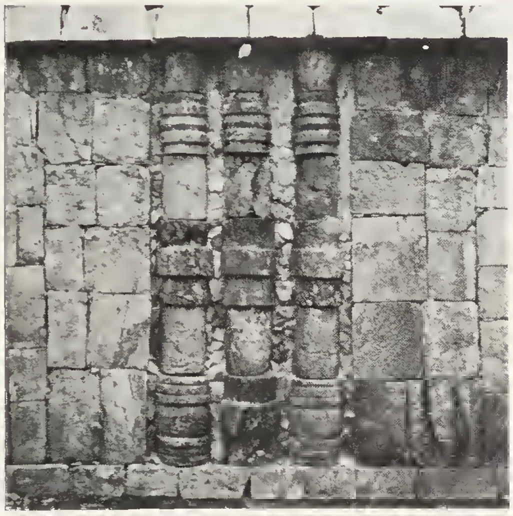


Figure 169. Sayil, Structure 1B2. Banded split columns between doorways to Rooms 4 and 5.

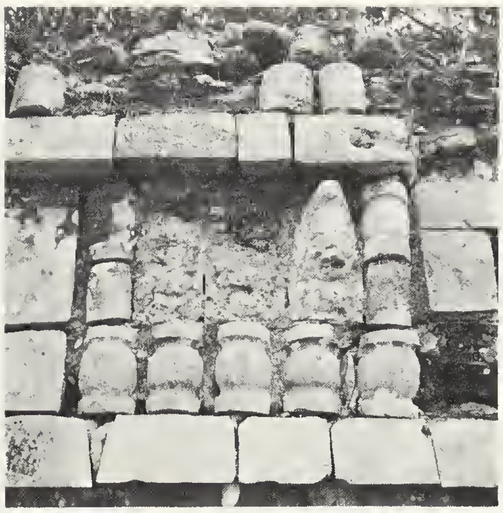


Figure 170. Sayil, Structure 1B2. Central panel of banded colonnettes and anthropomorphic heads located on upper facade between Rooms 4 and 5 (cf. fig. 167).

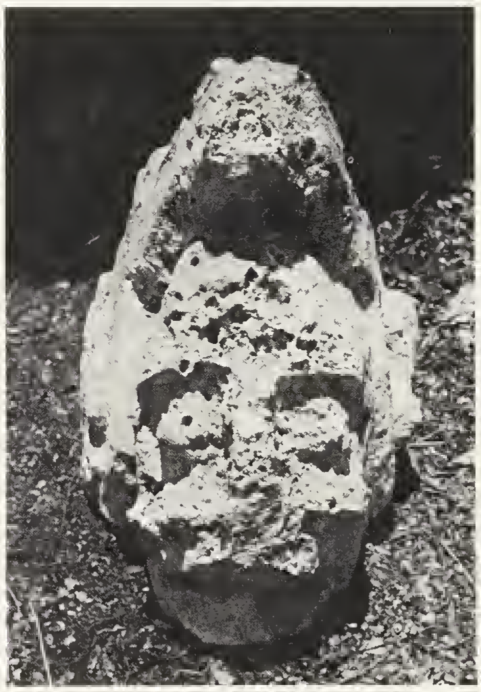


Figure 171. Sayil, Structure 1B2. Stucco anthropomorphic head fallen from west panel in upper facade over Room 4 (see fig. 167).

Both benches cover bedrock that rises above floor level at this point.

Vaults and Beams. Vaults very low in proportion to width (fig. 166). Wide capstones and high percentage of specialized vault stones.

Usual large beams, one at each end of room, in course below spring of vault. No beams in vaults.

Moldings. See figs. 166, 167.

Decoration. Panel of three banded facade columns in lower wall zone, centered between doorways to Rooms 4 and 5 (figs. 167, 169). Note different designs of spool elements.

Sloping upper wall zone carries panels of banded columns and anthropomorphic heads (figs. 167, 168, 170). Heads modeled in stucco (fig. 171), badly weathered, but some appear to vary in detail, suggesting portrayal of different deities.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

None observable without excavation.

STRUCTURE 2B1 COMPLEX

Northernmost of three major architectural assemblages at Sayil. Situated at northern end of causeway that roughly bisects city (fig. 164), Structure 2B1 Complex looks southward to other major architectural assemblages located midway along causeway (Str. 3B2) and at southern terminus (Str. 4B2).

Buildings of complex rest on relatively low platform, varying from about 1—2 m in height, depending on natural ground level. Platform walls seem to have been vertical everywhere and to have been built for the most part of large well-shaped stone, with many of the exposed sides roughly dressed (fig. 172). Examples of such stone are .50 × .35 m, .60 × .25 m, .60 × .40 m, and .50 × .60 m, all measurements on exposed faces. Great unshaped stones over 1 m square occur. No traces of mortar or plaster now showing on walls. Presumably loose stone fill behind walls.

Clear remains of parapet along eastern part of north side of platform. Low mound and talus at south edge of platform (fig. 176a) probably debris from parapet.

Primary approach to Structure 2B1 pretty clearly from south by stairway at end of causeway (fig. 173). Separate approach to Structure 2B2 by stairway at east. Complex accessible by stairways on all sides.

Eight chultuns directly associated with, or in immediate neighborhood of, complex (fig. 173, and see fig. 164 for examples at northwest). One of these, in Passage 1 behind Room 23, had been abandoned as receptacle for water storage. Probably other chultuns connected with complex that were not observed.

There are the remains of a dwelling at the southeast corner of the great platform that supports Structure 2B1 (see Ruppert and Smith 1957, p. 584), and traces of other such structures near the chultun just northwest of Structure 2B1.

Two altars A1 and A2 on southern terrace in front of Structure 2B1; a third altar A3 on ground in front of terrace further east (see Monuments, below).

Structure 2B1

(Palace, Great Palace, Temple Palace, Casa Grande)

PLAN, SECTIONS, AND ELEVATIONS

See figures 173–178, 180 (and see Proskouriakoff 1946, pl. 14; G. F. Andrews 1975, figs. 267, 271).

SUBSTRUCTURE

Stairways. Six that lead directly or indirectly to building. All risers apparently formed of single courses of stone and from .25–.30 m in height.

Construction. See Structure 2B1 Complex above.

Inner core of first and second stories presumably of loose stone fill.

Walls of platform supporting third-story superstructure made of rough stone set in mortar with small-stone chinking in interstices (fig. 179). Joint of staircase with platform wall gives pretty clear evidence platform never was faced with dressed veneer stone. Rough wall presumably plastered, but none now remains. Assume usual loose stone fill inside retaining walls. Two or three building phases to platform, but question if ever in use until in final form.

SUPERSTRUCTURE

(fig. 180)

FIRST STORY (Rooms 1–48)

Plan. See figure 173.

Sections. See figure 176.

Elevations. See figures 177, 178. Largely restored. Figure 177 omits decorative detail. Also see Mexico 1962 (p. 17).

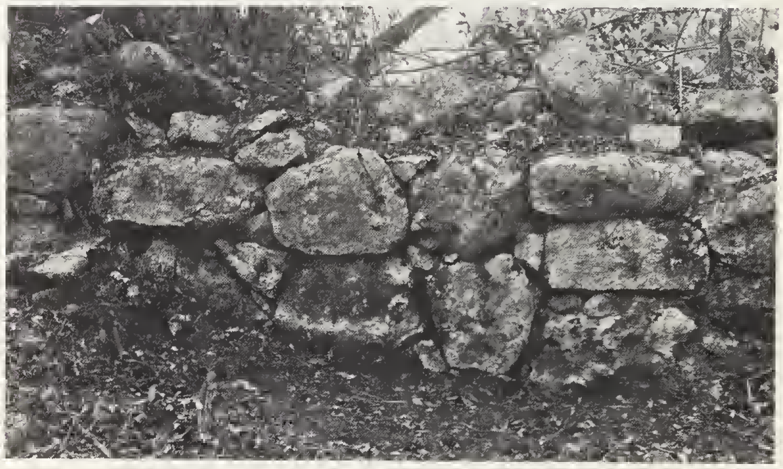


Figure 172. Sayil, Structure 2B1 Complex. Masonry of north wall of substructural platform, looking south.

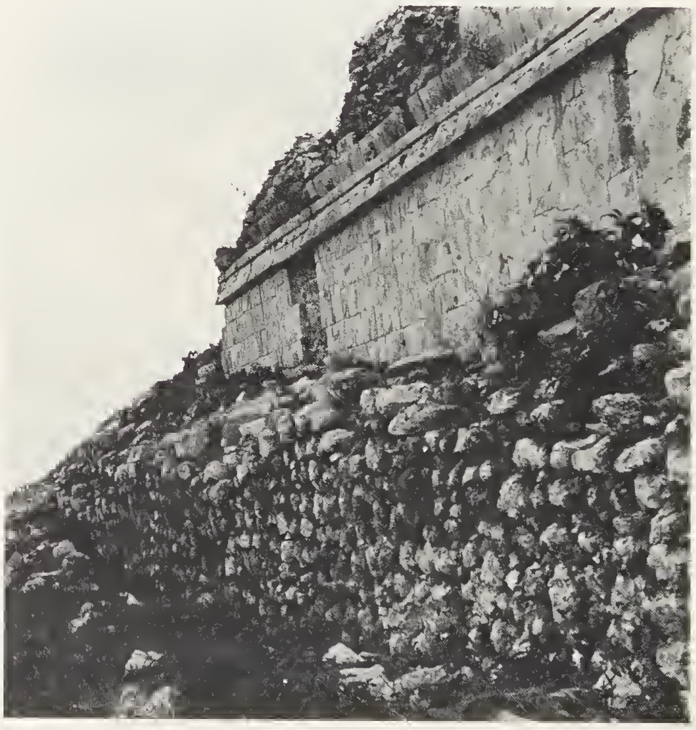


Figure 179. Sayil, Structure 2B1. View of rear wall and substructural platform of third story, looking southeast.

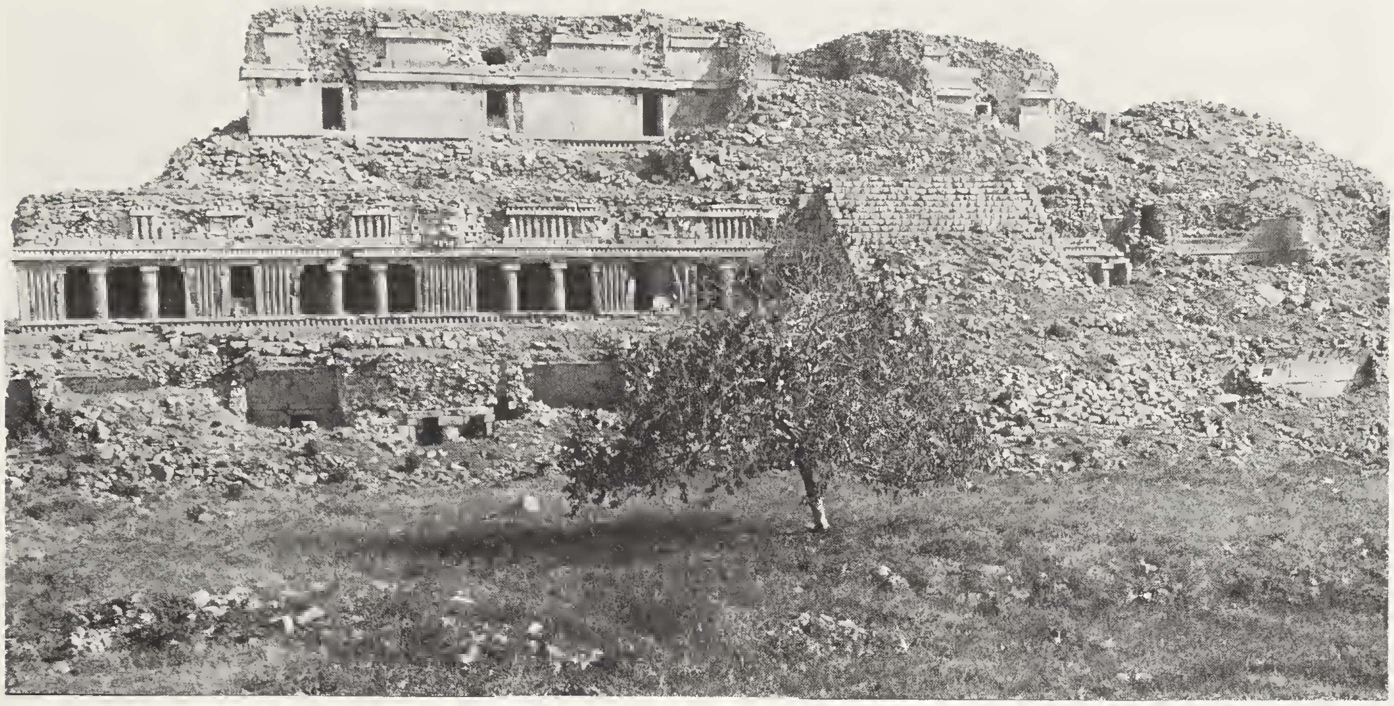


Figure 180. Sayil. Structure 2B1, looking northeast.

Base Moldings. Early building (Rooms 23–25) incorporated into first story (see Secondary Construction . . . , below) has simple course of excellently dressed stone (fig. 181a). Similar base molding is presumed to extend across Rooms 16–18 and 21, but nowhere visible and not excavated.

Base molding at northwest corner (Room 1) also simple course, but of larger stone and not so well cut (fig. 181b) as that on early building. Presumed to extend across Rooms 1–5, and possibly Rooms 6 and 7, which may have this type of base molding or smaller molding of Rooms 23–25.

Three-member base molding with colonnettes in middle member at northwest corner of Room 11 (fig. 181c). Presumed to circle Rooms 10–15 (fig. 178) and probably on front of Rooms 8 and 9. Rear of Rooms 8 and 9 may have either this molding or simple molding.

Base molding on eastern half of first story (Rooms 26–44) assumed to be of three-member-with-colonnette variety (fig. 178) because of upper-facade decoration, but subsequent excavation has uncovered simple molding (see Mexico 1962, p. 17).

Stairways. Main stairway on south rises to level above roof of first story, where there is landing or terrace that leads to foot of second flight of stairs which rises to third story (figs. 172, 176a, 178). Good evidence of balustrades. Rough walls to staircase with outer walls faced with well-cut stone and about 1 m thick built against inner rough staircase walls (fig. 182a). Secondary walls presumably supported ramplike balustraces. Impossible to say whether balustrades were alteration or were part of original design of builders.

Steps made of single courses of well-cut stone rather consistently .22 m in height, .30–.70 m wide, and .20–.30 m deep (fig. 182b). No good measurement for risers but estimate about .20 m. Treads about .25 m.

Rear stairway at north apparently without balustrades (figs. 173, 176a). Walls of staircase faced with dressed stone (fig. 185b). Two lowest steps have broad treads (.50 m) whereas steps above have more normal narrow treads. Risers about .18 m. Stones run .20–.60 m in width.

Floors. Very little showing. Tend to be whiter than usual. Step-up to Rooms 22 and 35 and presumably to Rooms 11, 13, 15, and 19, where floors are deeply covered by debris.

Unusual floor construction in Room 34 at step-up to Room 35 (fig. 183a). Possibly planned floor on top of "tight fill," which would be normal level, but floor seemingly never built. Loose fill of rough, gravelly sascab (see Roof, below). Tight fill very hard.

Series of floors in Room 22 (fig. 183b) at northwest corner of early building (Rooms 23–25). Lowest floor presumably contemporary with early building. Height of final floor above buried base molding is due to step-up of floor level from Room 21 to Room 22 (also see Passage 1 in Secondary Construction . . . , below).

Walls. Usual construction with exterior wall stone (fig. 189c) better dressed than interior facing stone (figs. 186c, 187). Wall stone of early building (Rooms 23–25) possibly slightly better cut and faced than on rest of first story. Outer surfaces of walls at each side of doorway to Room 35 faced with exterior variety of wall stone, as is customary with interior entrances. Usual tendency of walls to flare from jambs to corners of rooms. Outer walls run about

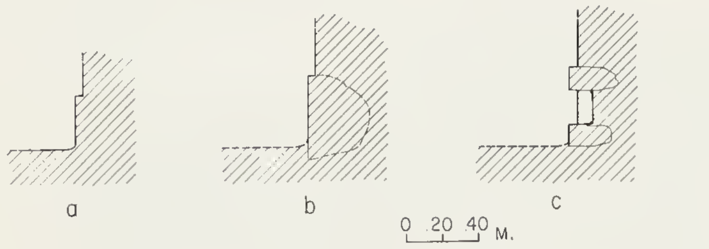


Figure 181. Sayil, Structure 2B1, first story. Base moldings: a, early building (Rooms 23–25); b, at west (Rooms 1–5); c, southwest wing (Rooms 8–15).

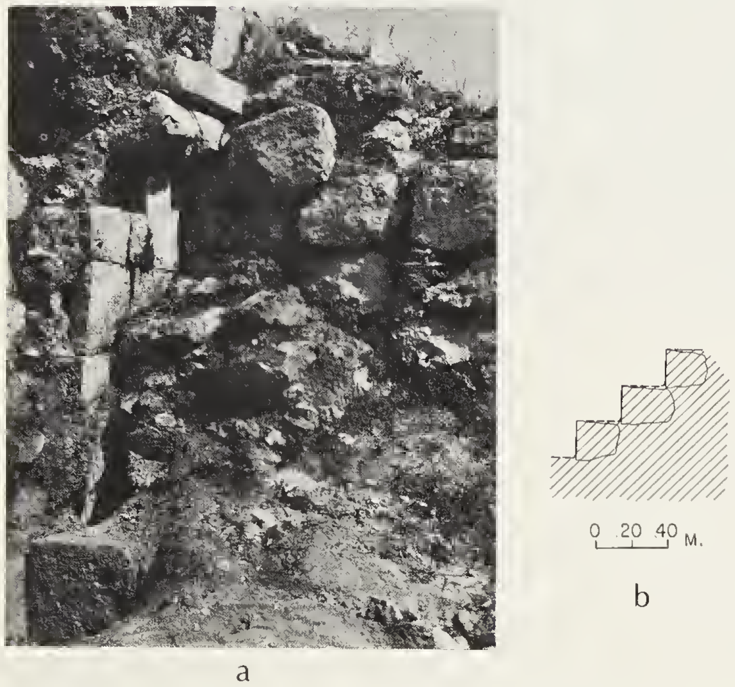


Figure 182. Sayil, Structure 2B1, first story. Main south stairway: a, west side, looking east, and showing buried facade of Room 25, rough masonry of inner wall of staircase, and single stone (lower left) of well-cut and dressed masonry of outer wall; b, detailed section of three steps.

.70 m thick, transverse walls .90–1 m. Early building walls (Rooms 23–25) slightly lighter.

Doorways. Usually about .10 m narrower at top than at bottom, brought about by slight tilt of jambs (figs. 178, 187). All lintels of stone set immediately below medial molding. Jambs of typical construction of several wide stones, one above the other, or of two vertical courses of cornerstones with small stone and mortar between (figs. 184a, 187). Columnar doorways have corbels at top of jambs to balance capitals (fig. 178). Columns both straight sided and barrel shaped, and of one or more drums (fig. 184). Originally plastered, so appeared monolithic. Doorway with single column (Room 21) only example observed at Sayil (fig. 178; and see Mariscal 1928, figs. 35–37).

Unusual example of large molding stone used as lintel over doorway to Room 45 (fig. 185). Also exceptionally thin jamb stone.

Wall Depressions. Cordholders of tongue-at-side and of two-hole varieties (fig. 186a), the former much more common. On interior walls at each side of doorways and above each column just below spring of vault.

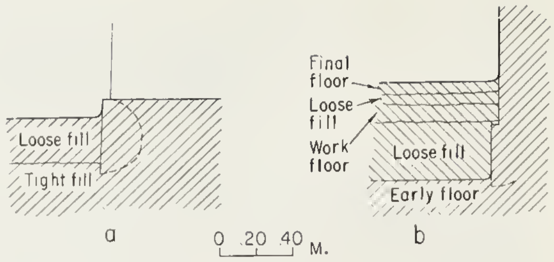


Figure 183. Sayil, Structure 2B1, first story. Floor construction: a, Room 34 at entrance to Room 35; b, series of floors in Room 22 at northwest corner of early building (Rooms 23–25).

Cupboardlike depression just above floor at west end of Room 21 (fig. 186b, c). Similar depression in one of western rooms, probably Room 2 (notes not clear).

Bench. One example .19 m high observed in Room 45 (see fig. 173).

Vaults and Beams. Vaults consistently spring from level immediately above primary course of medial molding (fig. 176) except at east end Room 21 where old exterior molding of early building (Rooms 23–25) is used as spring course. Level of spring in Room 35 unusual in being below that of Room 34 (fig. 184a), as spring in inner room is normally above, or level with, spring in outer room.

Vaulting in no way unusual (fig. 187). Great proportion of stone not of highly specialized variety (fig. 188b, bottom), but some nearly triangular in section (fig. 188b, middle), and some with slightly concave back and short tail (fig. 188b, top), which approaches highly specialized forms. No distinction in shape of vault stone apparent between early building (Rooms 23–25) and later construction, but stone in early building slightly better dressed, and buried vault face (see Secondary Construction . . . , below) has rather small well-dressed stone.

Ends of vaults have very slight inclination from the vertical (fig. 184), about .10–.15 m, except in early building (Rooms 23–25) where inclination is about .28 m from vertical.

Large beam holes, .12–.8 m in diameter, occur below spring at each end of room, and small holes, .05–.10 m in diameter, near top of vault in combinations of two, three, or five (fig. 184).

Moldings. Early building (Rooms 23–25) carries simple rectangular medial molding immediately above lintels of doorways, and plain three-member cornice molding (figs. 178, 189a). This arrangement seems to have carried across Rooms 16–18, 21, but with medial molding rising over doorway to Room 21 and presumably over doorway to Room 17.

Wherever preserved on rest of first story, medial molding is of three-member variety with colonnettes in middle member, and cornice molding of four members with colonnettes in second member (figs. 178, 189b, c).

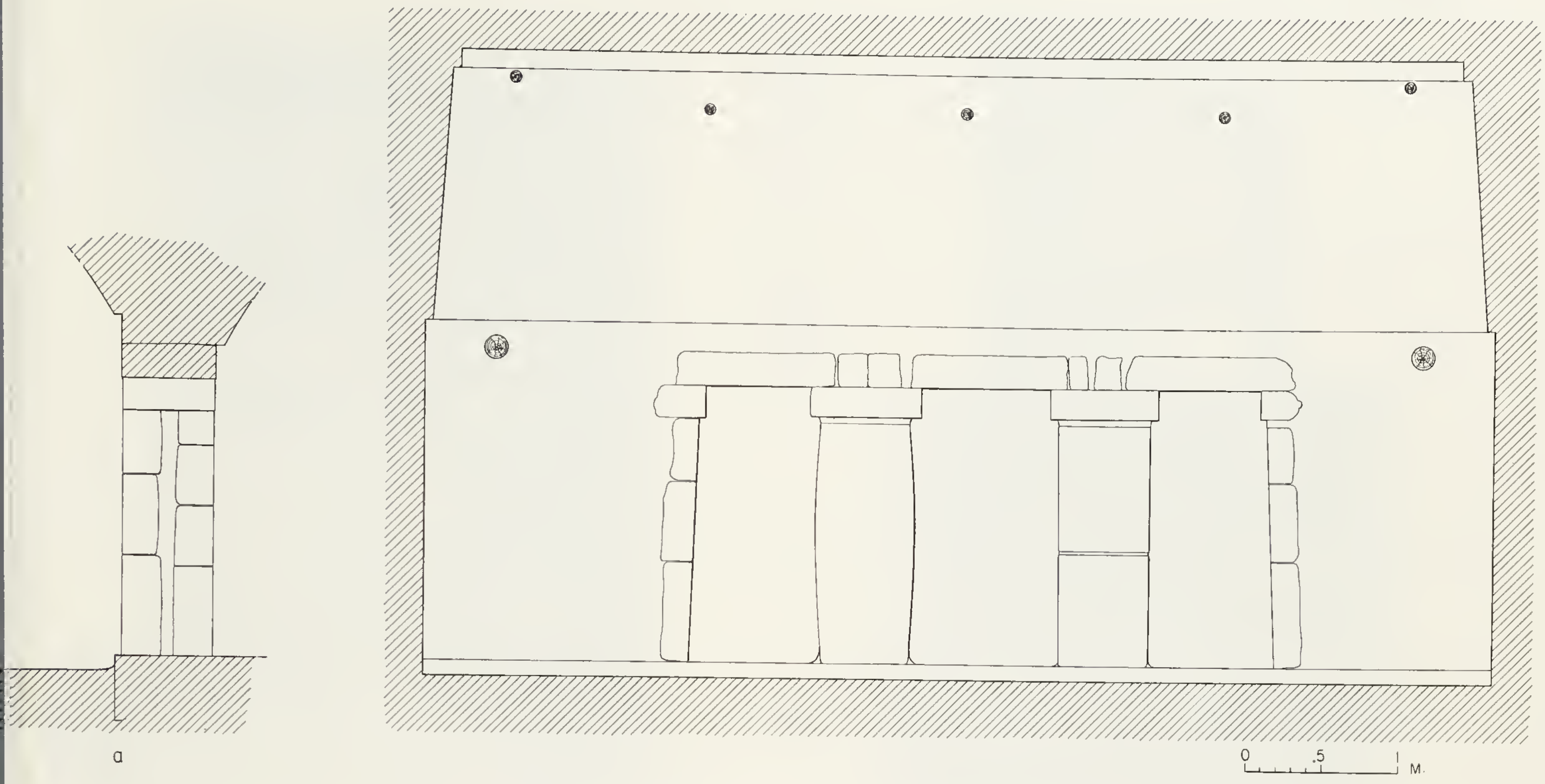
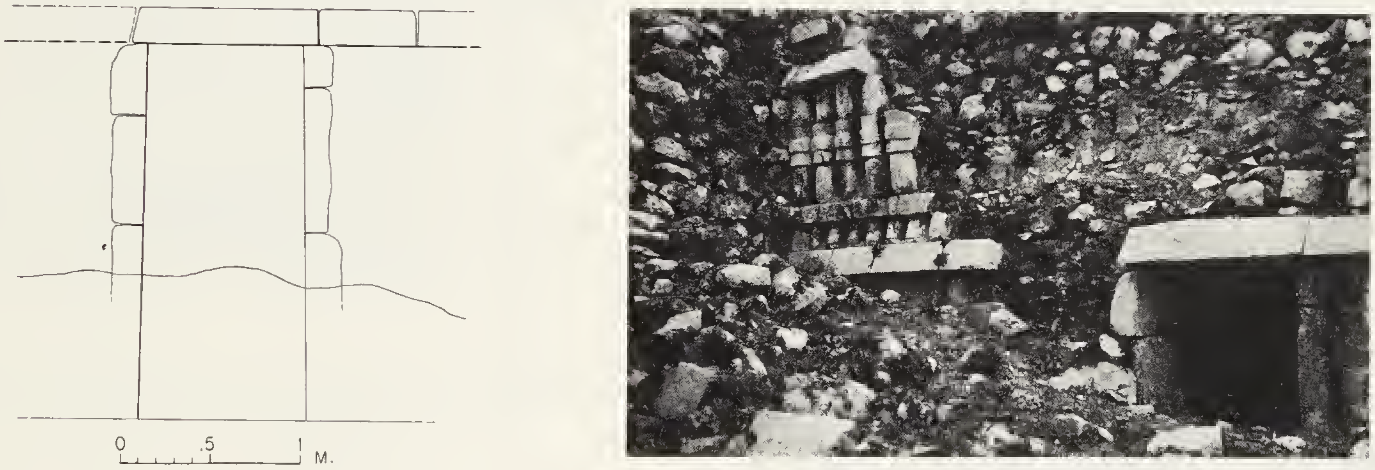


Figure 184. Sayil, Structure 2B1, first story. Elevation of west side of Room 34, showing characteristic (not exactly located) arrangement of beams and entrance to Room 35: a, elevation of south jamb of entrance to Room 35.



a

b

Figure 185. Sayil, Strucuture 2B1, first story, doorway to Room 45: a, elevation, showing large stone in primary course of medial molding that serves as lintel; b, doorway, upper facade decoration, and west wall of north stairway. Dressed facing of staircase is seen only where wall joins facade of Room 45.

Beveled rectangular element terminates colonnettes at corners of building. Medial molding immediately above lintels of doorways.

Roof. Original roof surface and series of subsequent roof levels seen above Room 5. Earliest roof .46–.48 m above under surface of capstones of first story vaults. Capstones .15–.20 m thick. At least two later roof surfaces above at intervals of .15–.20 m.

Roof and floor construction differ only in roof's having upper plaster surface directly on solid grouted masonry of stone, and mortar above vaults and capstones, whereas floors usually have loose gravellike base of maybe .10 m in thickness, capped by solid stratum of finer gravel (sascab) and mortar approximately .05 m thick with final plaster surface about .01 m thick.

Decoration. Upper facade of early building (Rooms 23–25) probably plain (fig. 178). Fragment of what seems to have been geometric decoration on upper wall zone of Room 16 (see Proskouriakoff 1946, pl. 14). Wherever standing and visible elsewhere on first story, decoration is

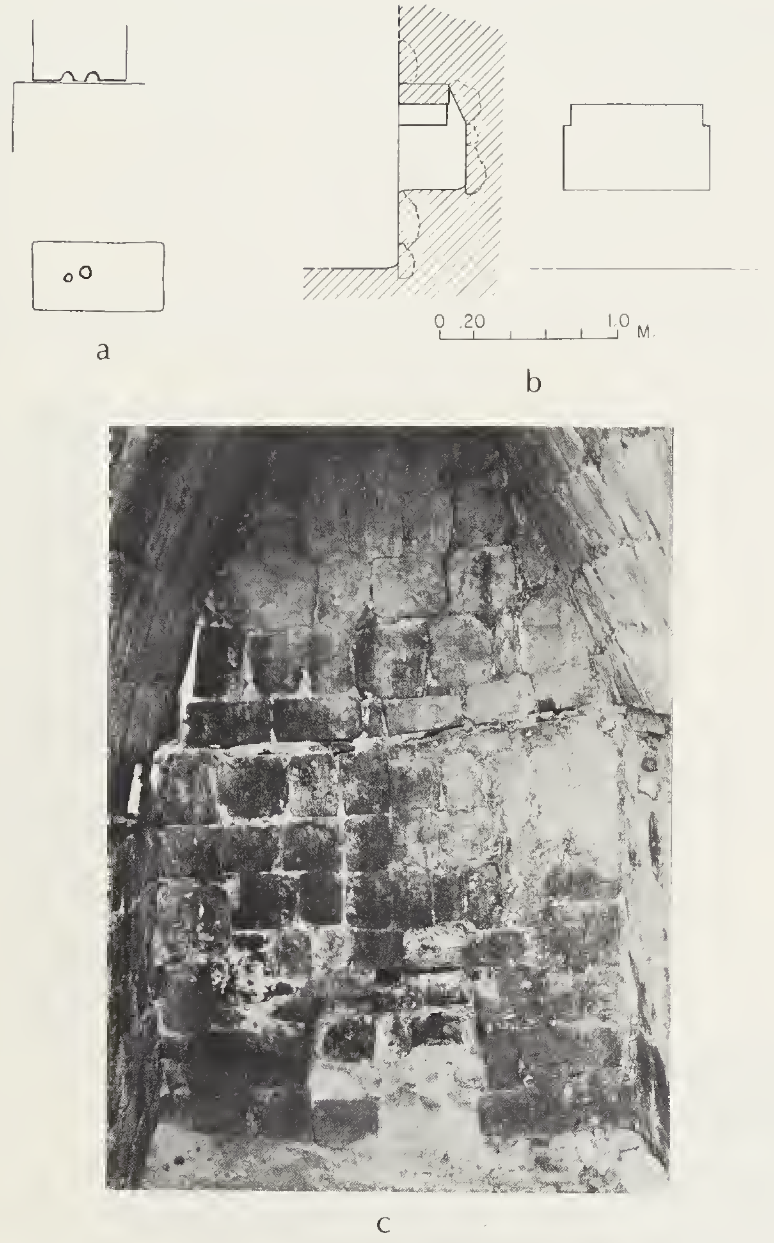


Figure 186. Sayil, Structure 2B1, first story. Wall depressions: a, sketch of cordholders (scale about 1:20); b, section and elevation of niche in Room 21; c, niche in Room 21.

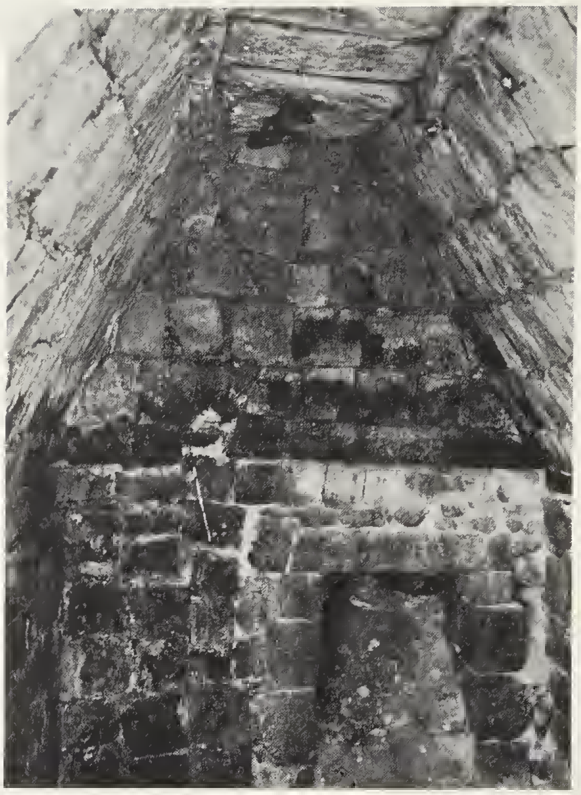


Figure 187. Sayil, Structure 2B1, first story. Room 16, looking west at doorway to Room 6.

of banded split columns in upper wall zone (figs. 178, 185b, 189).

Fallen stone figure near southeast corner of building (fig. 190). Original location unknown.

SECOND STORY (Rooms 49–86)

Plan. See figure 174.

Sections. See figure 176.

Elevations. See figures 177, 178. Restored. Figure 177 omits decorative detail.

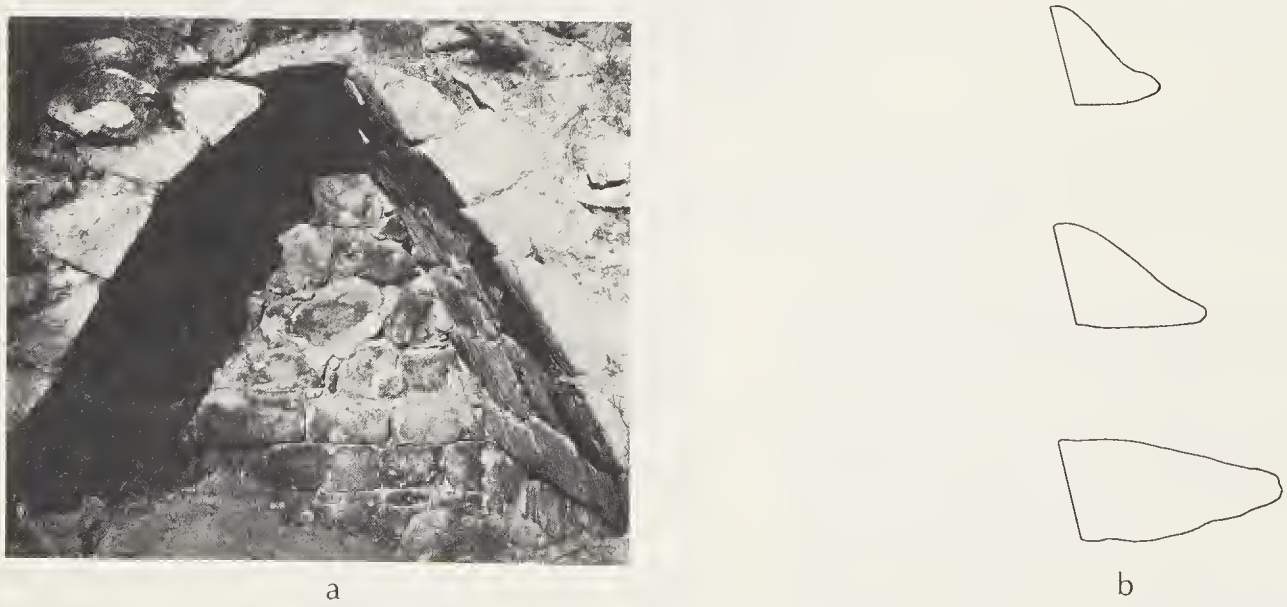


Figure 188. Sayil, Structure 2B1, first story: a, section of vault of Room 37, looking west; b, profiles of characteristic vault stones (no scale).

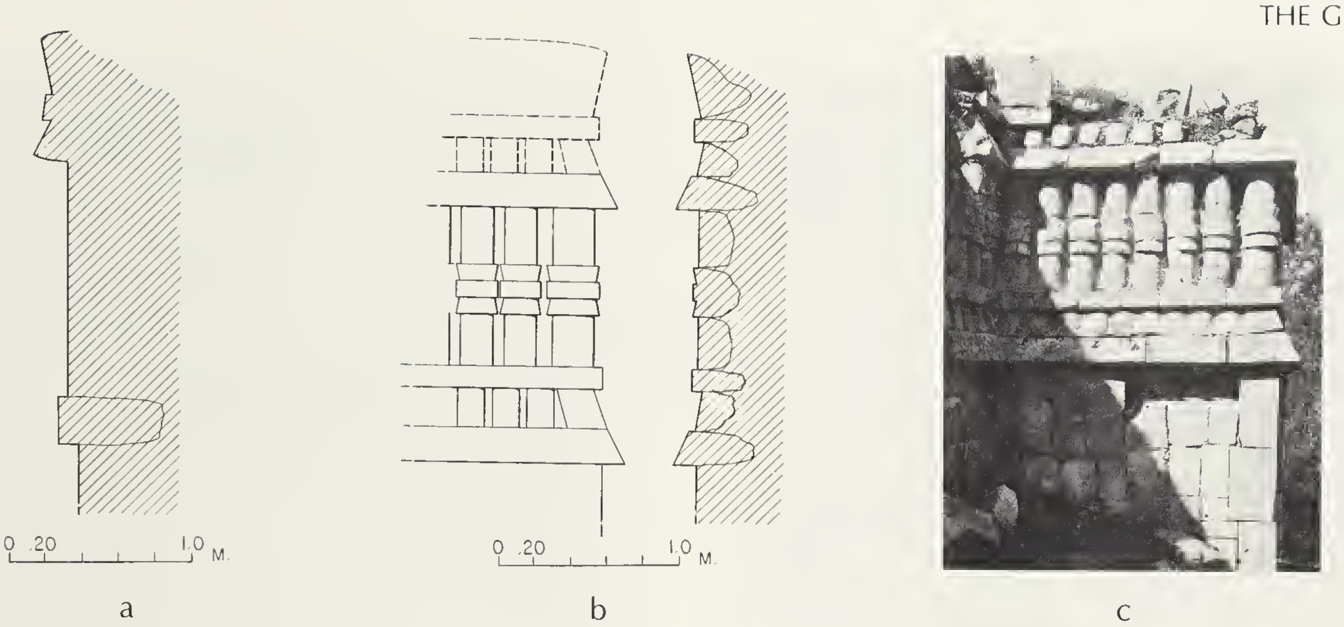


Figure 189. Sayil, Structure 2B1, first story. Moldings and decoration: a, section of upper facade of early building (Rooms 23–25); b, elevation and section of upper facade at northeast corner of Room 1; c, northeast corner of Room 1, looking west, and showing juncture of Room 1 and Room 48.

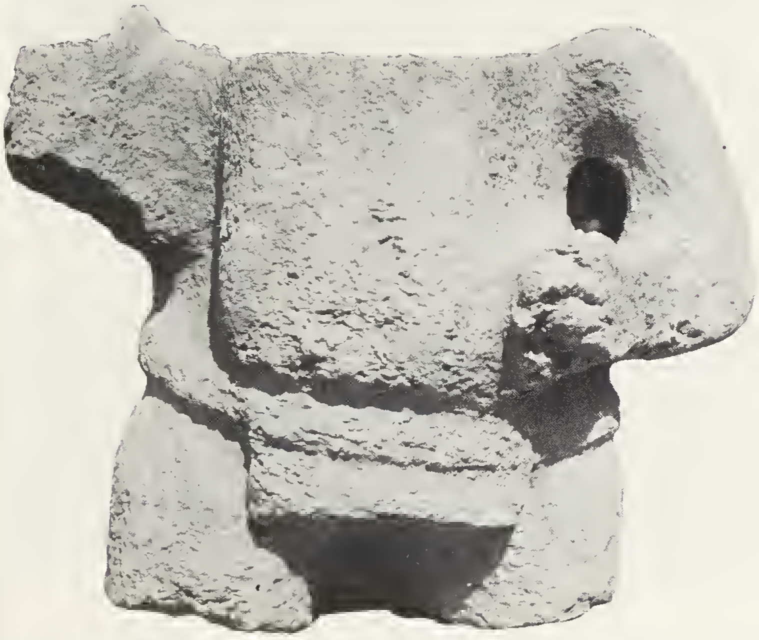


Figure 190. Sayil, Structure 2B1. Fallen stone figure with tenon at rear. Found near southeast corner of building and presumably from facade of Structure 2B1.

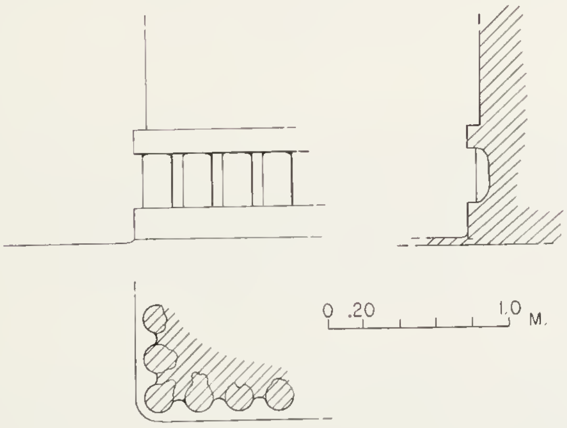


Figure 191. Sayil, Structure 2B1, second story. Elevation and sections of base molding at southwest corner.

Base Molding. Three-member molding with colonnettes in middle member (figs. 178, 191, 192, 201). Colonnette at corner and upper and lower members of molding rounded at corner.

Stairways. Second flight of main stairway at south rises to level above roof of second story, where there is broad landing that leads to foot of third flight (figs. 175–178). Walls of staircase faced with dressed stone (fig. 193a) and seem to have had balustrades .80–.90 m wide. Step stones about .22 m high and risers probably about .20 m.

Earlier stairway under second flight (fig. 176a). Narrower than secondary stairway, with rough masonry walls to staircase (fig. 193), against which were built balustrades of secondary stairway (fig. 174). Early stairway also steeper than later. Steps of roughly cut stone .25–.55 m long and about .25 m high. Treads and risers also about .25 m.

Question if early stairway is contemporaneous with second story or built subsequently. Facade and moldings of second story seem to run under west wall of staircase (fig. 193b), but primary course of cornice molding appears to abut east wall of staircase (fig. 193a). Probably best thought of as contemporary operation with various stages of building going on at various times. Some indication that top three steps of stairway were added later in order to reach landing, which is above roof level of second story.

Stairway to third story started at north side of building but never got beyond pile of loose stone. Fragment of rough wall, presumably wall of staircase, at west, but no eastern wall (fig. 174). Stairway offset from lower flight at north and apparently was to be in line with southern stairway.

Possibly stairway in Passage 4 (fig. 174), but uncertain without excavation.

Floors. Good deal left at places. Hard and well polished. Run from russet to light buff in color. Invariably seems to be step-up to rear rooms (figs. 195, 198).

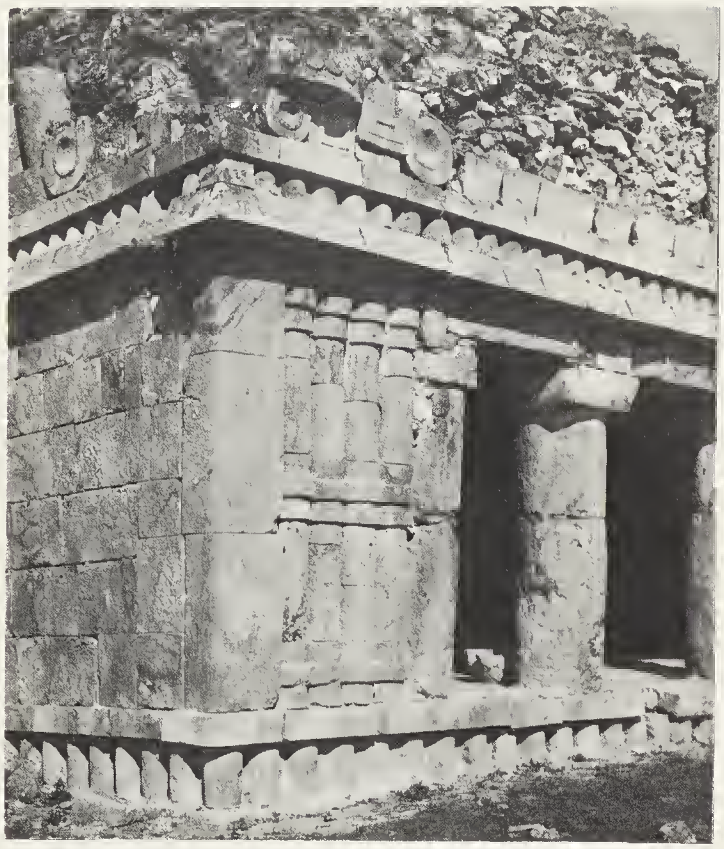
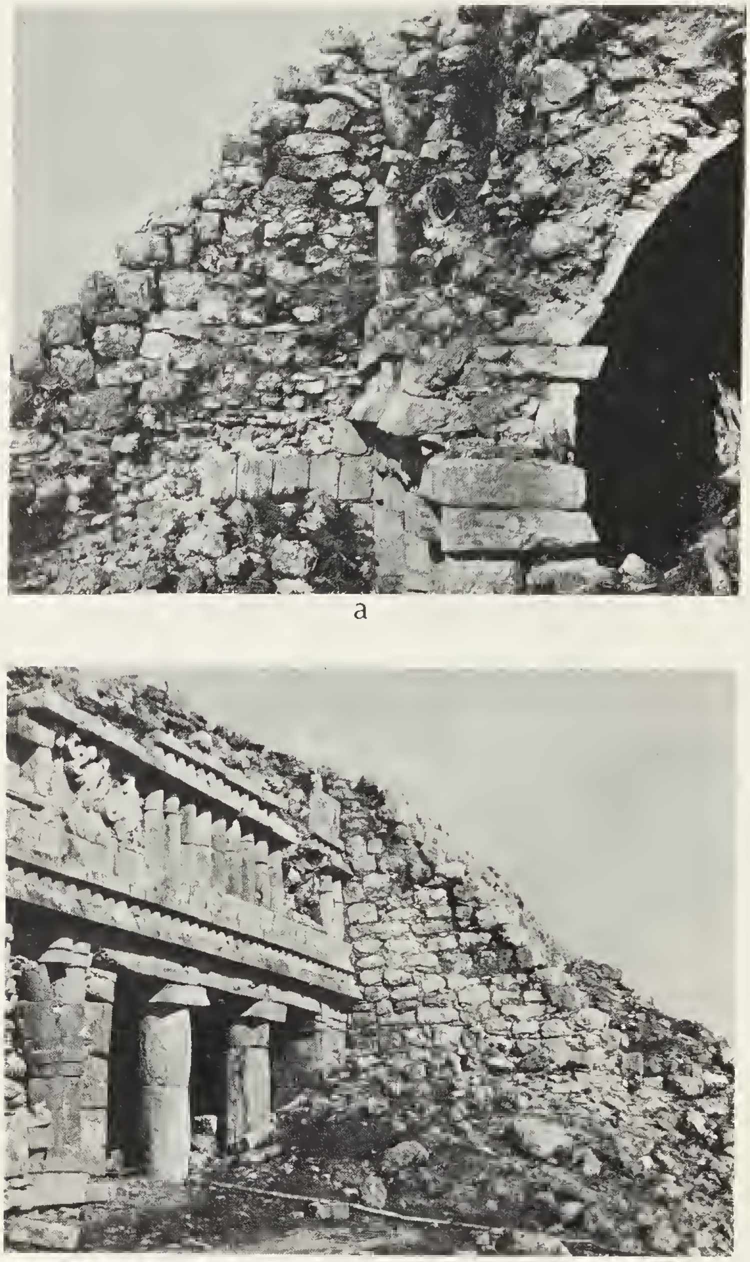


Figure 192. Sayil, Structure 2B1, second story. Southwest corner, looking northeast, and showing base molding, banded split columns next to columnar doorway, medial molding, and fragmentary remains of corner masks in upper zone.



a

b

Figure 193. Sayil, Structure 2B1, second story. Stairway to third story: a, east side of staircase, looking west, and showing rough masonry wall of early stairway, and dressed stone facing (below level of medial molding) of wall of later stairway; b, west side of staircase, looking east, and showing rough masonry wall of early stairway. Note coping course still in place at juncture of cornice molding with stair wall.

Early floor runs beneath second-story building (figs. 176, 191). Floor construction of usual upper stratum of plaster resting on loose gravelly (sascab) fill, with old floor or tight fill as base (fig. 194b).

Two steps on terrace before southwest quadrant of second story and probably at least one step at southeast (fig. 174). Platform that buries most of base molding before Room 50 (fig. 195).

Walls. Usual better cut and dressed facing stone on outer wall surfaces than on inner (figs. 192, 196b, 199). Stone averages around .25 × .30 m on face, some considerably bigger. Facing stone mostly about .20 m thick, but runs from .10 m. to .25 m. (fig. 194a).

Front walls average about .60 m thick at doorjambs and tend to thicken to about .70 m at corners of rooms. Medial walls between rooms no heavier than outer, which is unusual. Transverse walls about .80 m thick.

Pronounced tendency for course of stone beneath spring of vault to be inset from lower wall surface anywhere from .01–.15 m (figs. 195, 198), the wall swelling to room corner whereas inset course and spring course maintain straight line. Usual plaster capping of wall beneath inset course and primary member medial molding (see Sabacche, Str. 5).

Doorways. In general, like those of first story, but considerable variety in construction of jambs. These made of one to four stones, each stone running full width of jamb (figs. 196a, 198) and often very thin (e.g., .09 m), of two vertical courses of cornerstones with mortar between courses (fig. 195), of vertical courses of cornerstones that join near middle of jamb, and combinations of these techniques.

Multiple entrances with columns always have capitals on columns and corbels on jambs (figs. 177, 178, 196a); and see Mariscal 1928, figs. 32–34). Column shafts of single stone or of two drums which may be straight sided or barrel shaped. Originally plastered, and straight-sided profile probably the ideal.

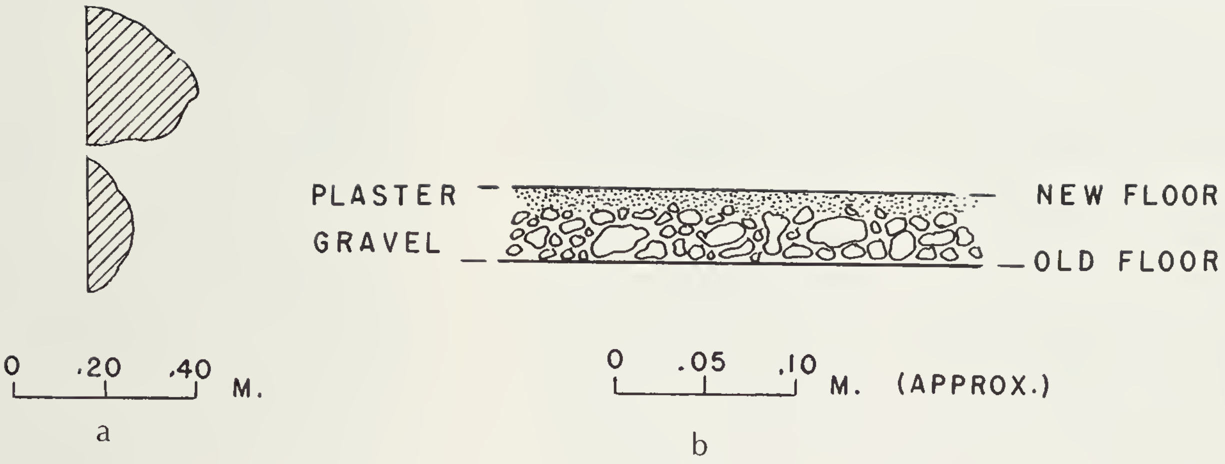


Figure 194. Sayil, Structure 2B1, second story. Wall and floor construction: a, section of wall stones, showing approximate maximum and minimum thickness; b, typical floor construction.

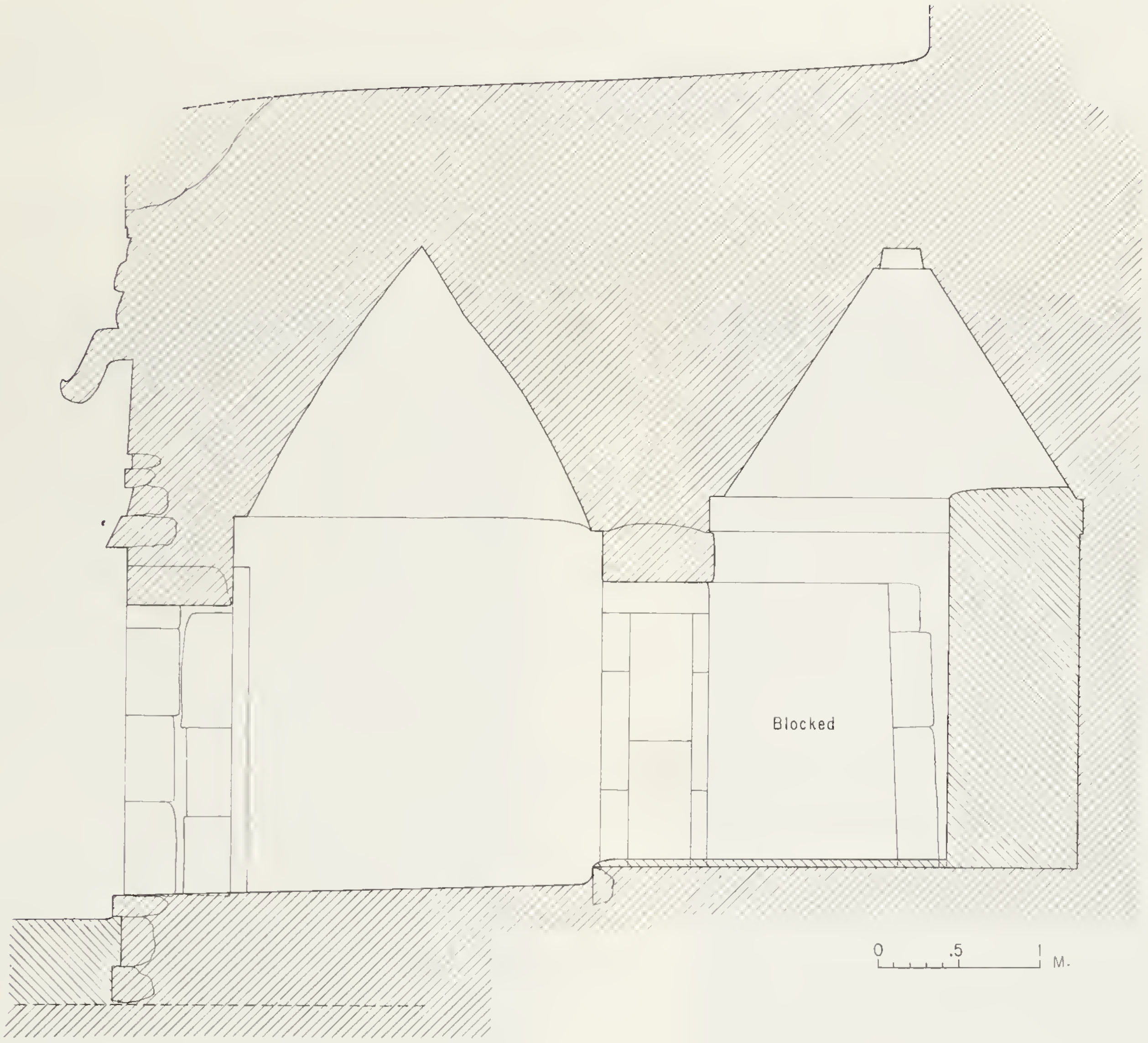


Figure 195. Sayil; Structure 2B1, second story. Section through Rooms 50 and 51, showing varieties of doorjamb construction, aberrant form of vault (Room 50), and secondary construction burying most of base molding, blocking doorway to Room 49, and covering rear wall of Room 51.

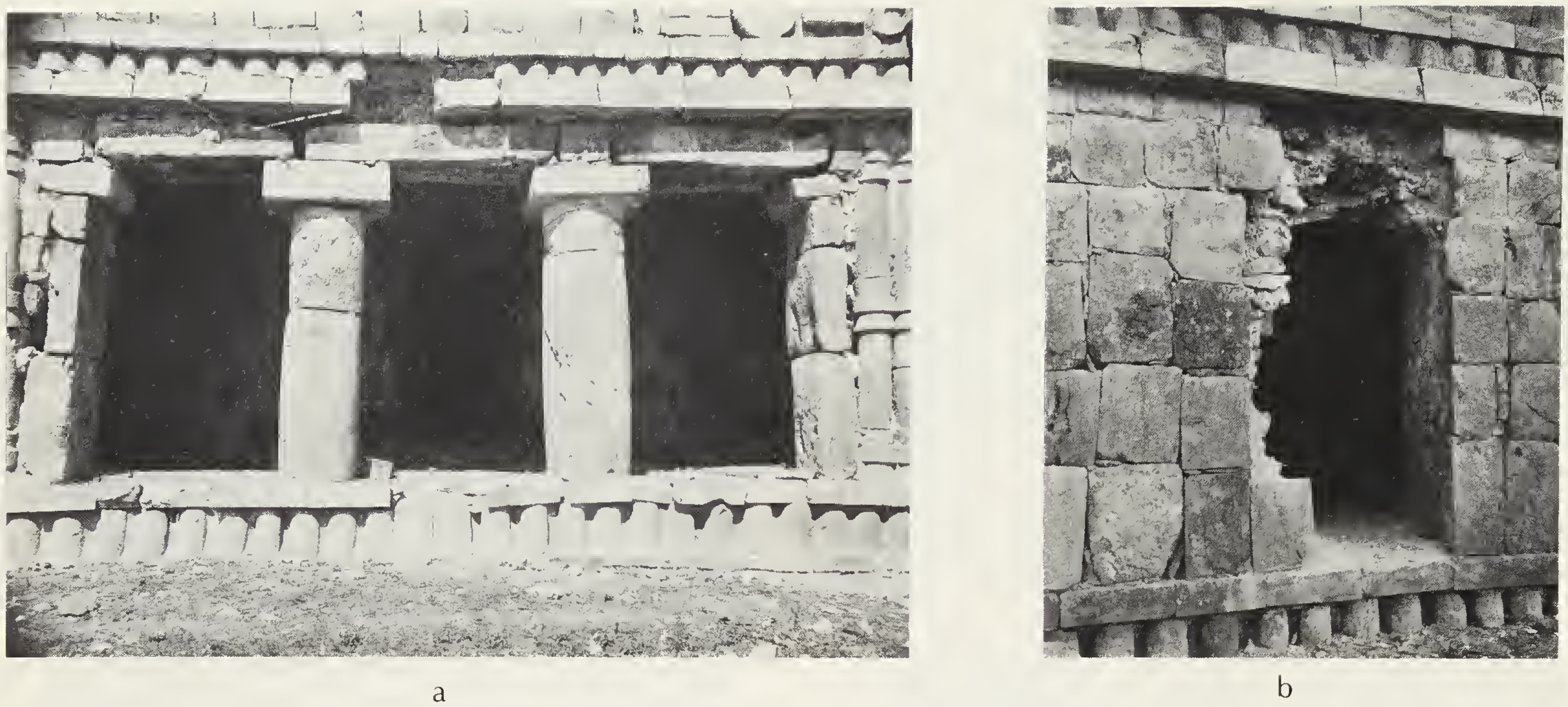


Figure 196. Sayil, Structure 2B1, second story. Doorways: a, typical multiple entrance (Room 54) of two columns with capitals, full-width jamb stones surmounted by corbels, and stone lintels; b, unusual example of doorway (Room 49) formed by breaking through existing wall and plastering rough surfaces thus left.

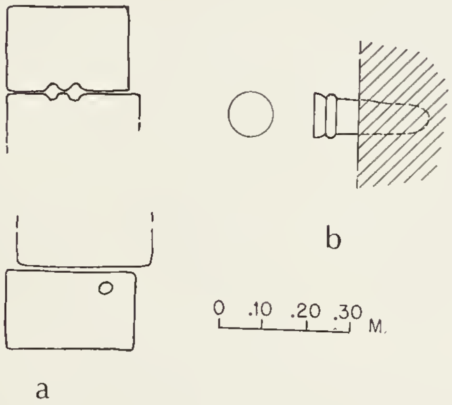


Figure 197. Sayil, Structure 2B1, second story. Cordholders: a, two-tongue and one-hole varieties; b, carved stone peg.

Exceptional example of breaking through wall to form doorway (Room 49, west end; but see Yakalmai, North Group, West Building, p. 492). Masonry above doorway formed natural arch, which was plastered, as was rough masonry at sides of doorway (fig. 196b).

Wall Depressions and Projections. Cordholders of one-tongue (figs. 186a, top, 209a), two-tongue (fig. 197a, top), one-hole (fig. 197a, bottom), and two-hole (fig. 186a, bottom) varieties. Placed on inside walls at each side each doorway near top and bottom of jambs and above capitals of columns.

Round stone peg in wall (fig. 197b) just below spring of vault and south of doorway in Room 51.

Benches. Pair of L-shaped benches .17 m high in Room 55 (see fig. 174).

Vaults and Beams. In general, characteristic of classic Puuc architectural style. Deeply tailed in spring course at level immediately above primary course of medial molding; offset at spring carries across ends of vault; arched soffit slopes and ends of vault have slight inward lean; small offset course beneath capstones (figs. 176, 198, 199a). Instances of straight-sided and convex soffit slopes, and one example of vault rising to peak rather than capstones (figs. 195, 199b).

Vault stone better cut and dressed than wall stone, vault stones tending to be poorer in rear rooms than in outer rooms. Greater proportion of specialized vault stone than in first story. Vaults of passages (fig. 174, passages labeled P 2–5) crudely built of rough stone.

Considerable variation in number and location of beams. Common arrangement is that in Room 53 (fig. 198), but top and bottom rows often occur one course higher, and middle row one course lower.

Moldings. Four-member medial molding with colonnettes in second member, which is terminated at corner with beveled rectangular block (figs. 178, 192, 201). Cornice molding identical but for tall coping course (fig. 193b). Considerable variation in both moldings in angle of bevel and projection of members.

Roof. Fragment of roof surface showing just west of stairway. Probably sloped gradually upward to foot of platform supporting third-story building (fig. 176b).

Decoration (see Hissink 1934, pp. 49–50, 96). South facade west of stairway carries banded split columns in lower wall zone between doorways (figs. 178, 200). Same

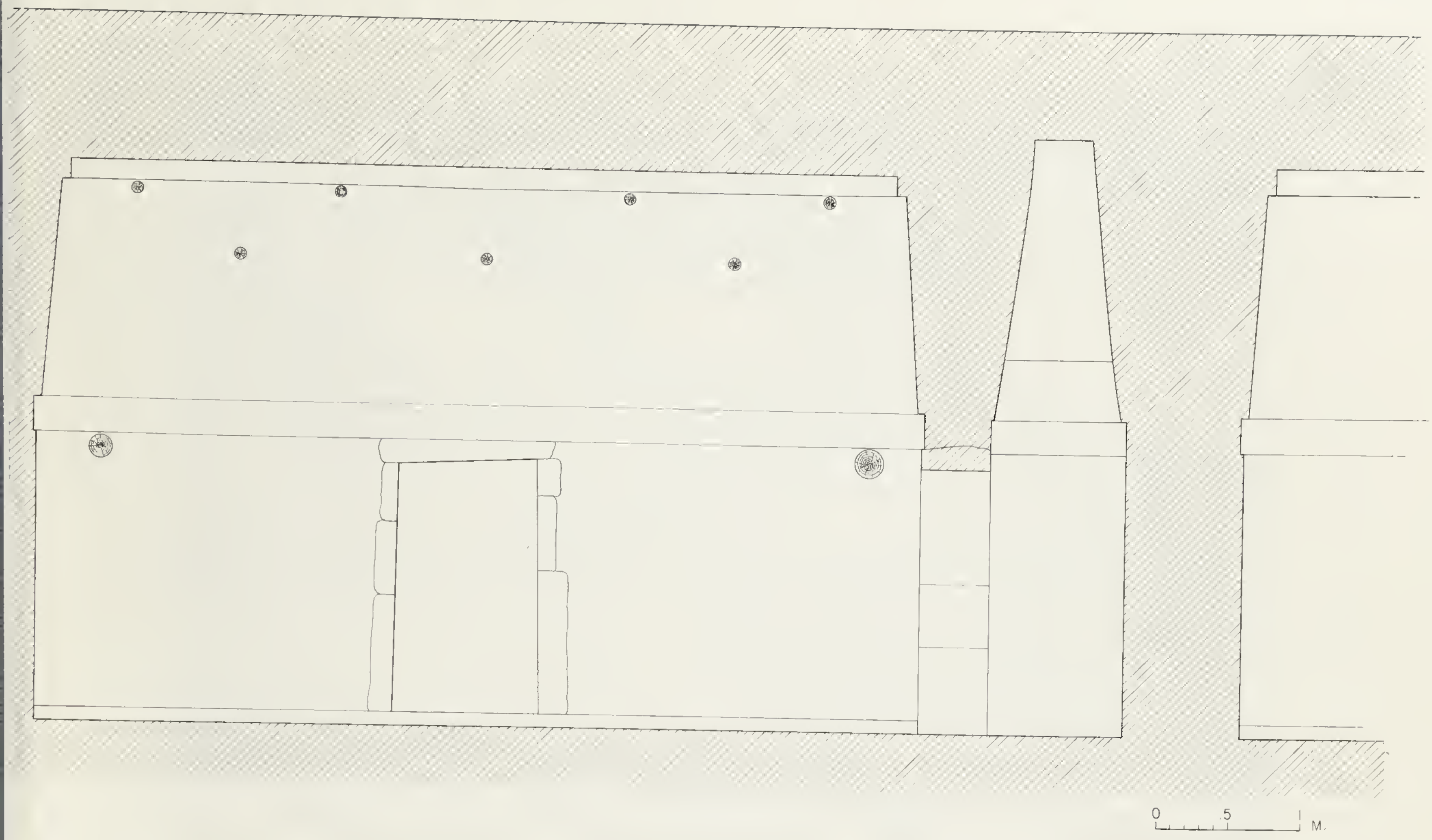


Figure 198. Sayil, Structure 2B1, second story. Section through Room 53, Passage 2, and west end of Room 54, showing doorway to Room 52 and beam arrangement in Room 53.

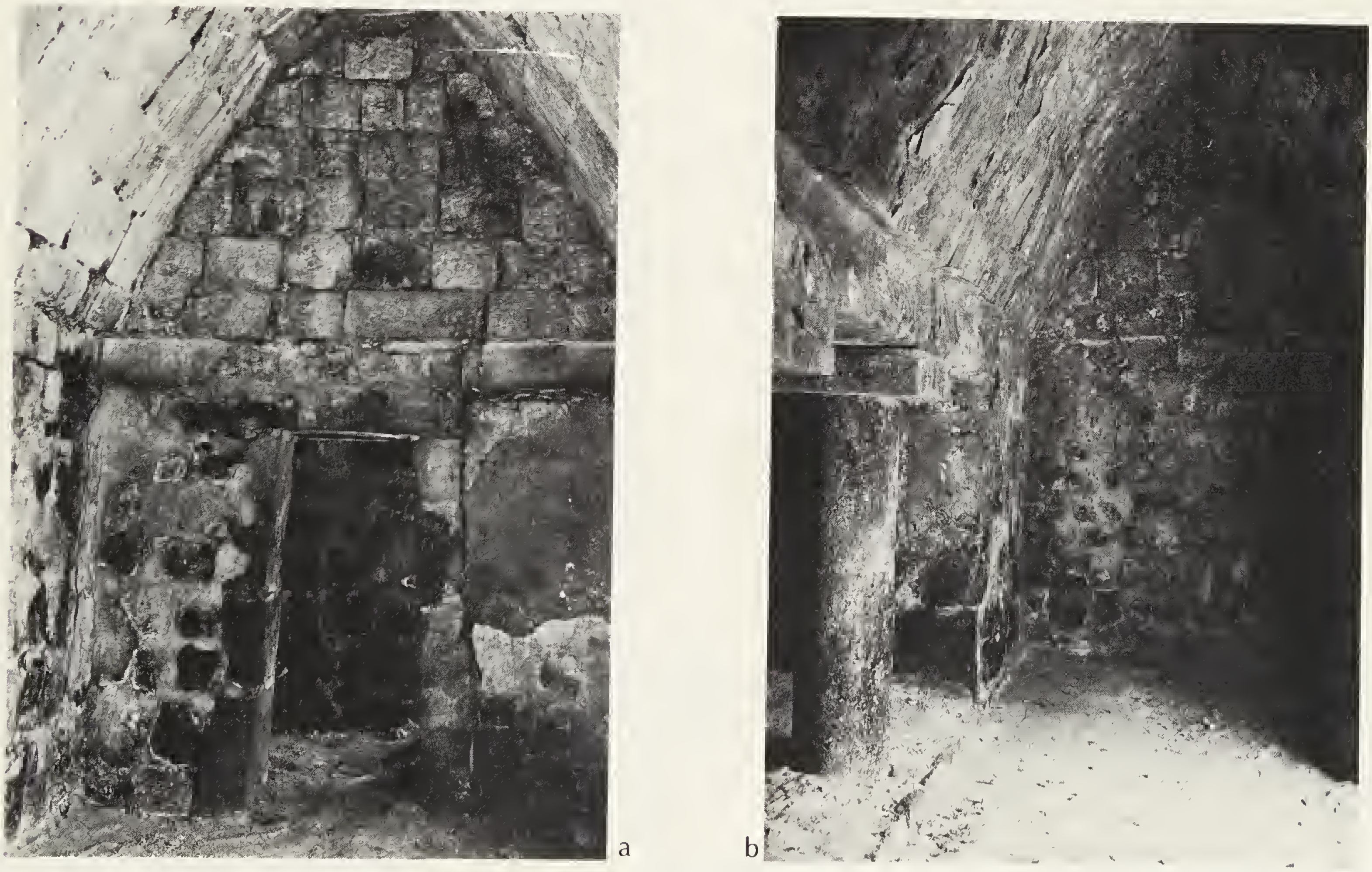


Figure 199. Sayil, Structure 2B1, second story. Interior views: a, Room 53, looking east through doorway leading to Passage 2; b, Room 50, looking south, and showing example of vault rising to peak instead of conventional capstone.

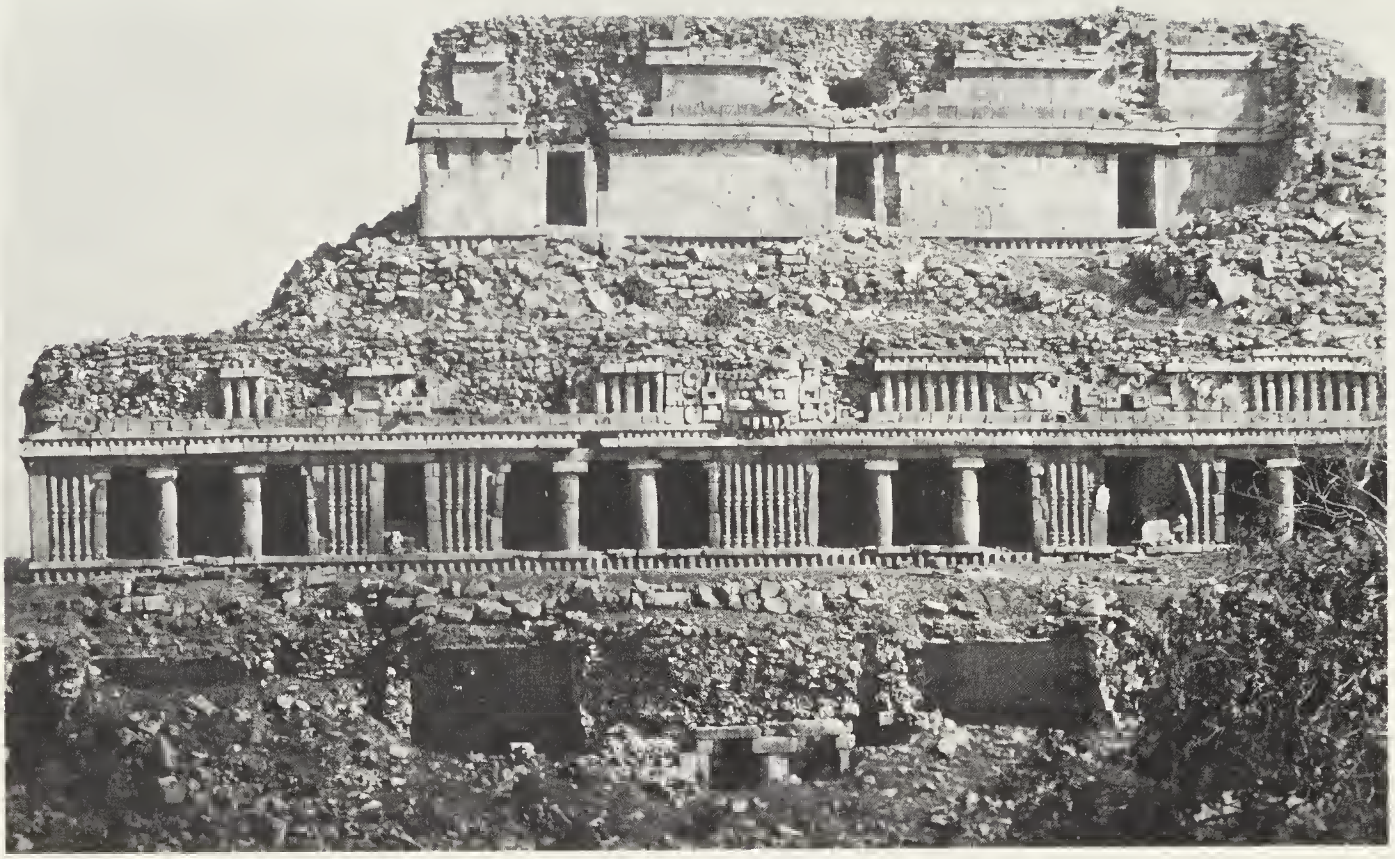


Figure 200. Sayil, Structure 2B1. Western half of building, looking northeast.

arrangement probably occurred on south facade east of stairway. Two panels of three banded split columns (fig. 201) in lower zone of west facade (fig. 174), and same arrangement presumed to have occurred on east facade. Eight panels of two each of these split columns spaced across north facade (fig. 174).

Upper zone of south facade, west of stairway, carries plain split columns, masks, figures of diving God (see Proskouriakoff 1951, p. 118), and stylized serpents (figs. 178, 200, 202, 203; and see Marquina 1928, 2d pl. foll. p. 68). Assume south facade east of stairway to have duplicated this, but not certain. Upper zone of west facade has mask over central doorway (fig. 204), masks at each corner (fig. 178), and plain split columns (fig. 201) between masks. No information on east facade. Few plain split columns remain on upper zone of north facade, and these probably extended across whole facade but may have been interrupted by masks or other forms of decoration.

Superimposed masks may well have risen above roof line (cf. Xlabpak, Str. 1, fig. 118), and my restoration (fig. 178) may be at fault in this respect.

THIRD STORY (Rooms 87–94)

Plan. See figure 175.

Sections. See figures 176, 205.

Elevations. See figures 177, 178. Largely restored. Figure 177 omits decorative detail.

Base Molding. Three-member molding with colonnettes in middle member (figs. 178, 206, 208). All members rounded at corners of building.

Stairway. Third flight of main stairway rises from landing or terrace that is above level of roof of second story (figs. 175–178). Landing approached from roof by two steps at each side, and two wide steps with deep treads at foot of third flight. Step stones .23 m high and finely cut and dressed on faces.

Rough inner walls of staircase to which were added wide balustrades with side walls faced with well-cut stone (fig. 207). Balustrades may originally have been 1.35 m wide and later increased to 2 m. One very large stone (.90 × .80 × .25 m) at foot each balustrade with smaller stone each side to complete width of balustrade and smaller stone above this.

Floors. No floor visible outside of building. Interior flooring of usual buff color. Not so hard as that of second story. Question if floor level steps up to Room 91, but level of spring of vaults of Rooms 90 and 91 higher than in rest of building (fig. 176a, c), although floor level of Room 90, judging from base molding (figs. 176b, 177), same as rooms to east and west, so floor of Room 91 probably higher.

Walls. Interior-wall facing like that of second story, but outer facing stone better cut, fitted, and dressed, and

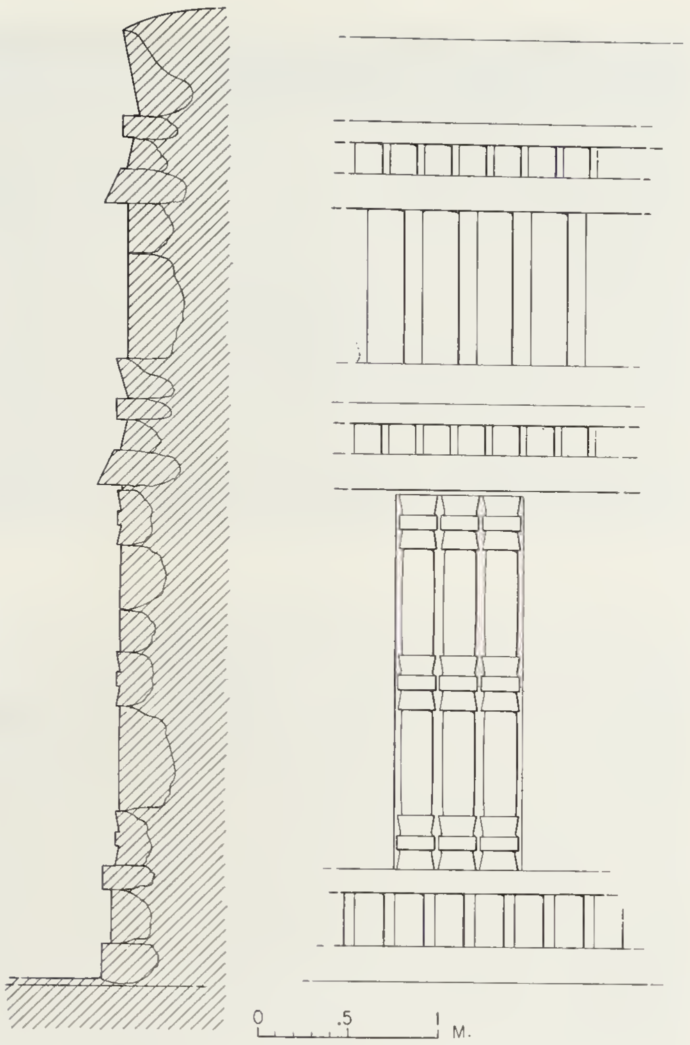


Figure 201. Sayil, Structure 2B1, second story. Section and elevation (partly restored) of moldings and split columns on west facade.

much larger (fig. 208), stone running up to .60 × .60 m on face and probably averaging .30 × .40 m. Plaster cap over walls beneath medial molding clearly defined. Inset course beneath spring of vaults present but not pronounced (fig. 205a, b). Exterior corners of building nicely rounded (fig. 210).

Front wall of building exceptionally heavy, .90–.93 m at doorjambs (figs. 175, 176b, 205a). Raises question if flying facade was planned but never built.

Doorways. Simple rectangular doorways noteworthy in the use of wood lintels, a relatively rare feature in Puuc architecture (fig. 205a, c). Two large beams well cut on exposed faces over each doorway. Wood identified by Maya workmen as chacte *(Caesalpinia platyoba)* or zapote *(Achras zapota).* Each jamb built of six well-cut and fitted stones.

Wall Depressions. Cordholders of tongue-at-side (fig. 186a, top), tongue-at-corner (fig. 209a), and one-hole varieties (fig. 197a, bottom) in usual position inside of doorways.

Vaults and Beams. Vaults generally characteristic, but of large stone, particularly finely cut and fitted, much of it specialized (fig. 210). Stone runs up to .45 m wide and .50 m high on face and probably averages .30 × .35 m. Follows usual relation of spring course to primary course of medial molding (fig. 205a) except for Rooms 90 and 91 where spring is one course higher than elsewhere.

Beams followed same arrangement as in second story (fig. 198), with one instance of extra pair below and just inside of end beams in middle row.

Moldings. Simple three-member medial and cornice moldings (figs. 178, 205). Lowest member of each molding made of two courses of stone (fig. 208). Large specialized cornerstone from primary course of medial molding outside southeast corner Room 90 (fig. 209b). Most of coping member made of two courses of stone, but one stone that reaches full height (.62 m) still in place.

Decoration. All wall areas apparently plain but for panels over doorways that cut through cornice molding and rose indeterminate distance above roof (fig. 205). Panel over doorway to Room 89 only example in any state of preservation (fig. 208). Stone tenons in panels presumably once carried stucco decoration now fallen (see Proskouriakoff 1946, pl. 14).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Aside from the obvious conclusion that the second and third stories represent sequent building operations following the completion, or near completion, of the first story, there are some structural details, visible without excavation, that indicate the beginnings and growth of Structure 2B1.

(1) Rooms 23–25 represent an early building incorporated into the later construction of the first story. All visible adjoining construction, represented by the stairway at the

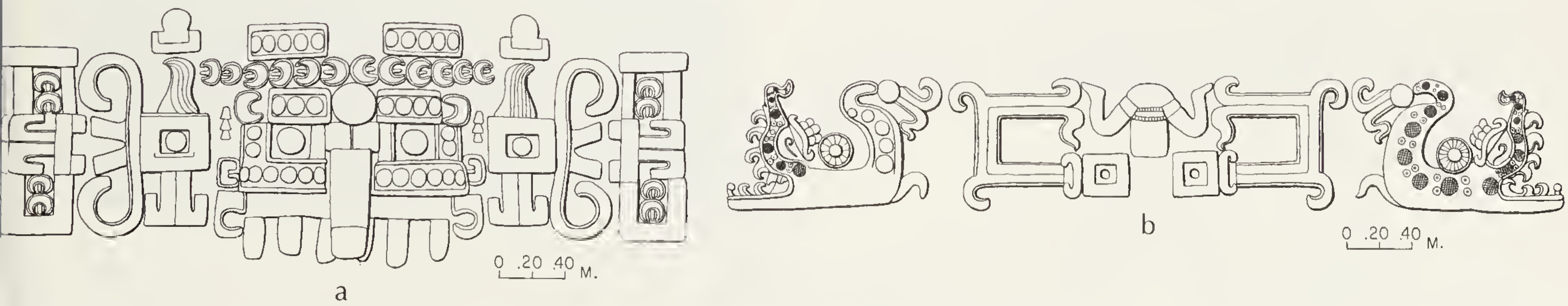
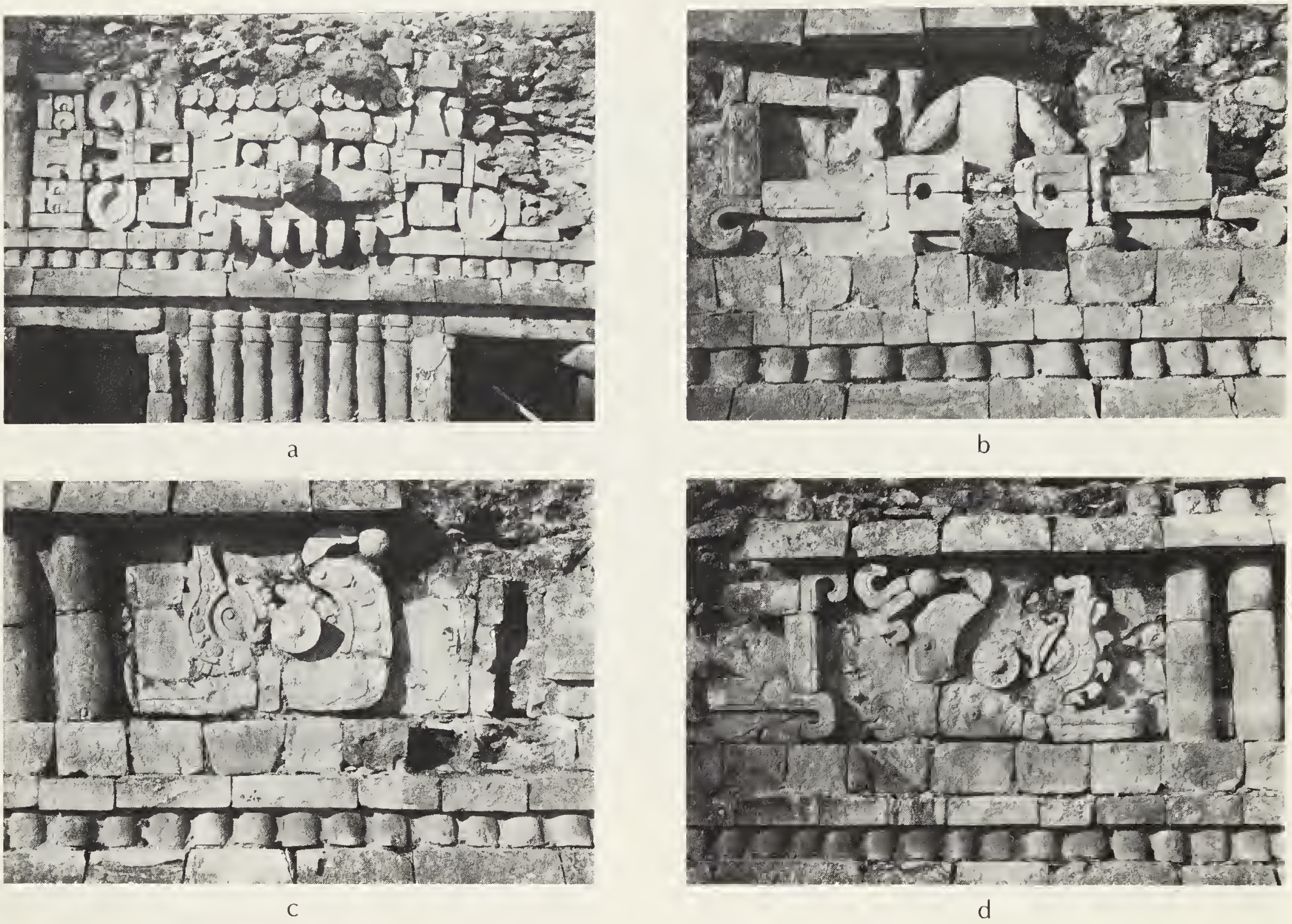
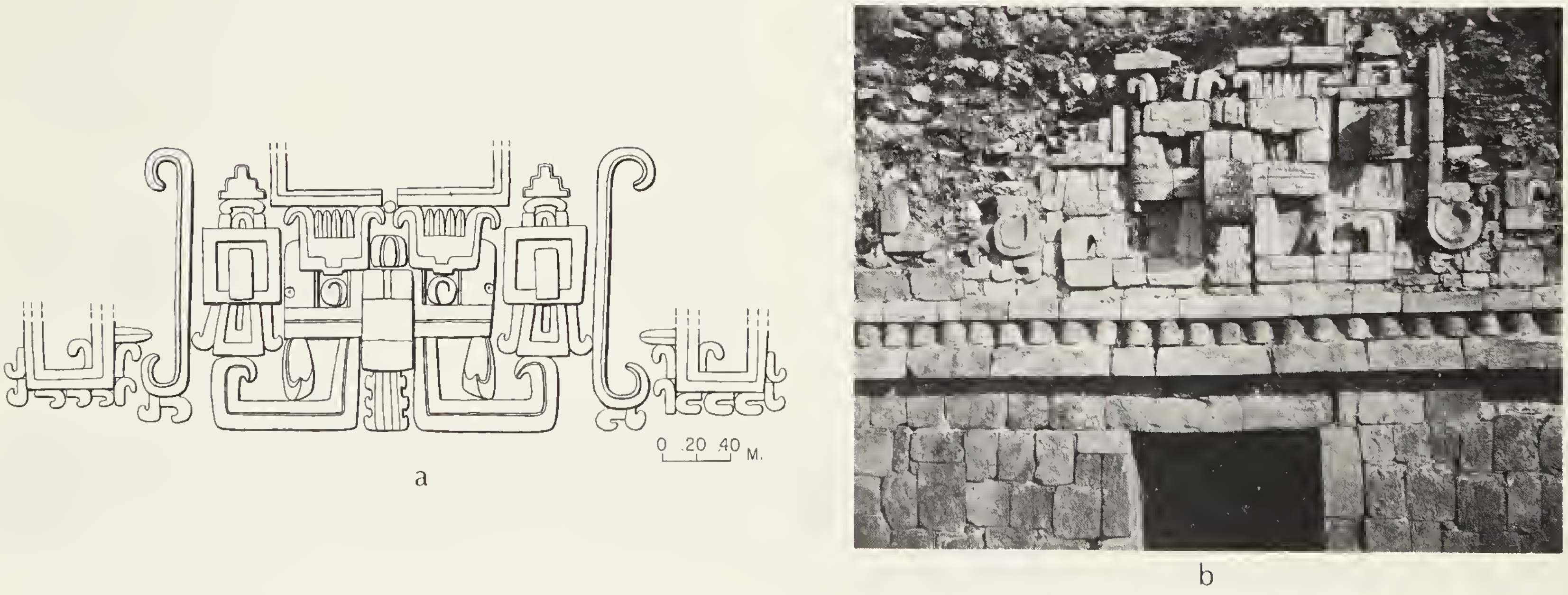

0 .20 40 M.
a
b
0 .20 40 M.

Figure 202. Sayil, Structure 2B1, second story. Decoration on south facade west of stairway: a, mask in upper zone between Rooms 54 and 56; b, Diving God flanked by serpents over entrance to Passage 3.



a b c d

Figure 203. Sayil, Structure 2B1, Second Story. Decoration on south facade west of stairway: a, mask (see fig. 202a); b, Diving God (see fig. 202b); c, d, stylized serpents (see fig. 202b).



a b

Figure 204. Sayil, Structure 2B1, second story. Decoration on west facade: a, central mask in upper zone; b, same mask and doorway to Room 50.

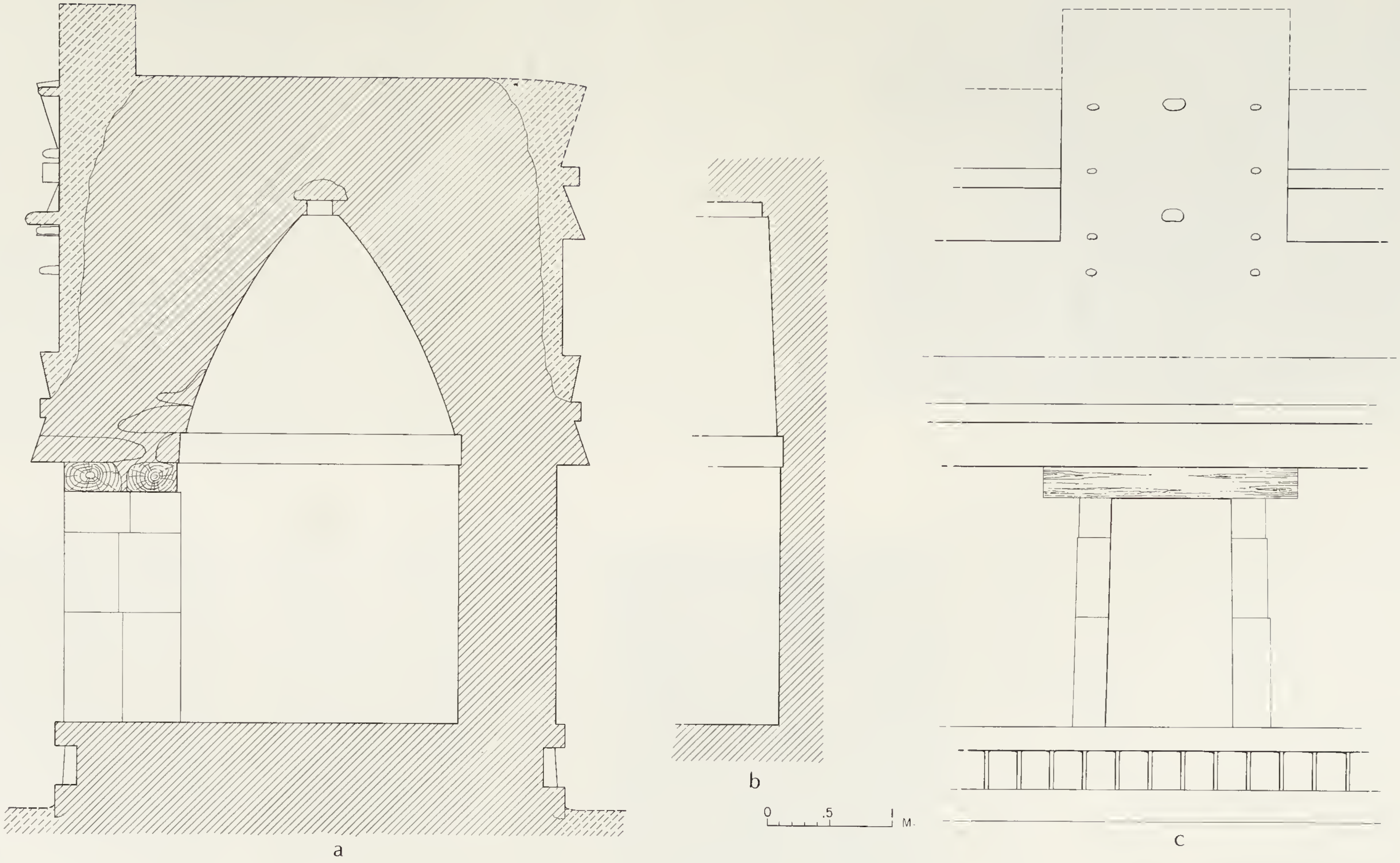


Figure 205. Sayil, Structure 2B1, third story. Architectural details: a, composite transverse section through room, showing jamb construction, wooden lintels, inset course below spring of vault, deeply tailed in spring course surmounted by specialized vault stone, and tenons to support decoration above doorway; b, section of end of room; c, elevation of doorway and of upper panel that once carried decoration.

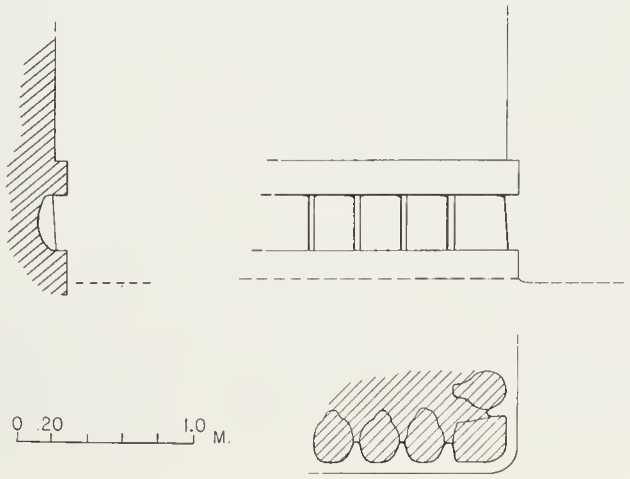


Figure 206. Sayil, Structure 2B1, third story. Sections and elevation of base molding at corner.

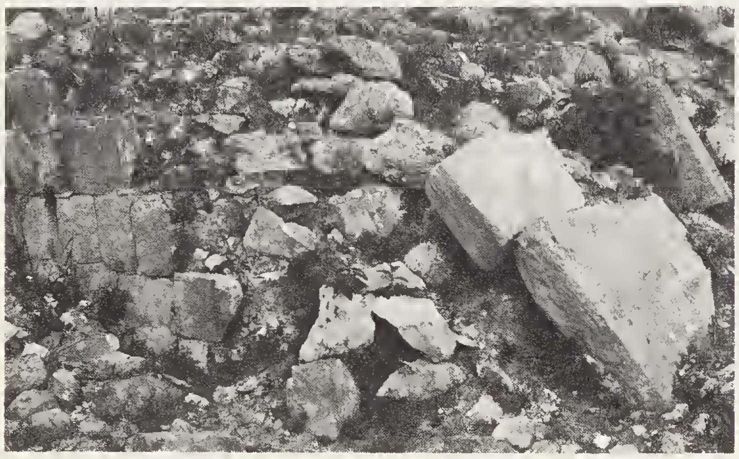


Figure 207. Sayil, Structure 2B1, third story. View of stairway, looking northeast, and showing faced stone of outer west wall of staircase and two stones of balustrade.

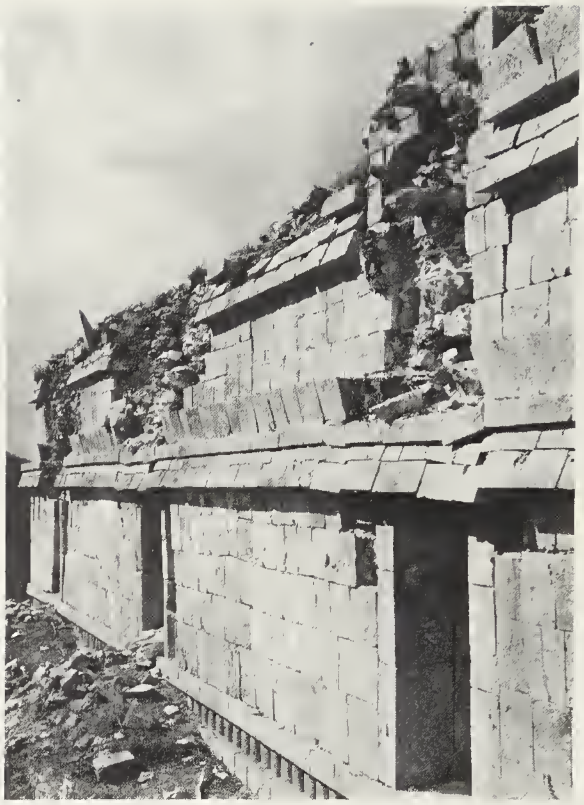


Figure 208. Sayil, Structure 2B1, third story. South facade and doorways to Rooms 87–89, looking northwest.

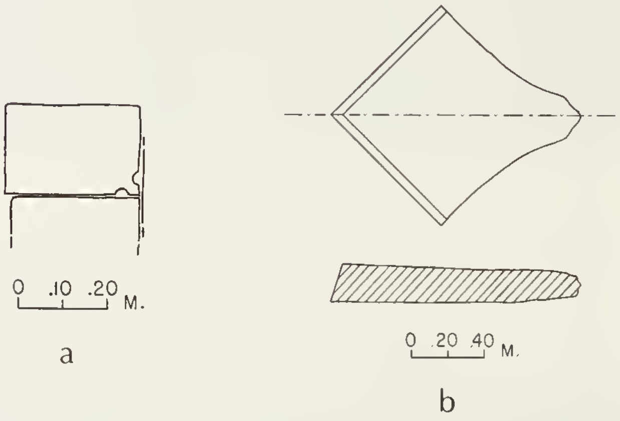


Figure 209. Sayil, Structure 2B1, third story. Architectural details: a, cordholder of one-tongue-at-corner variety; b, plan and section of large, specialized corner molding stone.

south, Rooms 21–22 at the west, and Passage 1 at the north, is secondary to the early building. It is possible this building had another room to the east that presumably would have been filled, but it probably consisted of only the three rooms shown on the plan (fig. 173).

(a) North of Room 23, in Passage 1, is a chultun (fig. 176b) that, judging from the floors in Passage 1, is at least as early as, and very probably earlier than, the early building.

(b) All of the construction associated with Passage 1, except the chultun, is secondary and tertiary to the early building (Rooms 23–25). The north wall of the passage seems to be only a retaining wall for the loose fill beneath the second story, but there may be other construction behind it. The passage is crudely vaulted, the south side of the vault springing from the medial molding of the early building (fig. 176b). There are three floors, even the latest leaving the chultun open, the earliest apparently being contemporary with the early building. Without considerable excavation it is impossible to follow, or to wholly understand, the sequence of construction in Passage 1. It appears the passage was at one time open to access at both ends. The east end seems to have been closed first, by masonry blocking that doorway (fig. 173), and later the west end was similarly sealed, thus leaving the passage and chultun inaccessible.

(2) North of Rooms 16 and 17 is a buried wall (fig. 173, dashed line) that supports the remains of one side of a vault. This buried construction represents the remains of a building that was largely demolished to build Rooms 16 and 17 and very possibly other rooms to the east and west. Two stones in the west end wall of Room 16, above and

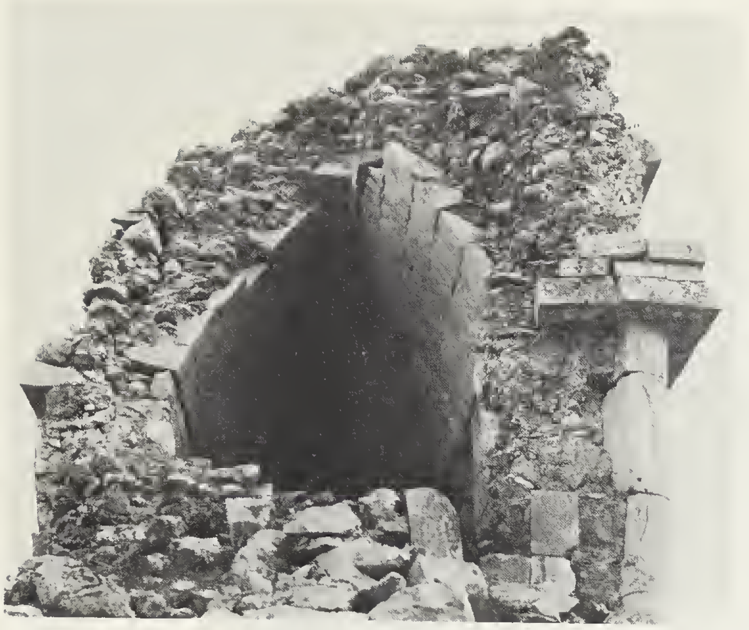


Figure 210. Sayil, Structure 2B1, third story. Fallen west end of Room 87, looking east, and showing rounded southwest outer corner and vault of room.

slightly left of the doorway (fig. 187), seem to mark the side of an old vault, and this may be a remnant of the old building. It is impossible, without excavation, to relate this building to the early building containing Rooms 23–25.

(3) Room 8 was built after Rooms 7 and 16, as shown by the joints between the walls of these rooms (fig. 173). It is probable that the entire southwest wing (Rooms 8–15) is later than Rooms 6, 7 and 16, 17.

Rooms 6 and 7 were once a single room, the wall separating them being secondary construction (fig. 173).

(4) The several roof strata and steps observed over the southwest quadrant of the first story seem mainly to have been a leveling operation preparatory to building the second story (fig. 176b). Note that the highest floor, with the exception of the small secondary platform before Room 50, runs under the second-story building.

(5) The considerable amount of secondary construction in the second story, consisting mainly of the filling, or partial filling, of rooms and passages (figs. 174, 176, 195), seems explainable only through fear of collapse due to the weight of the third story. Rooms 76–84, however, carry no excessive overburden, and there is a question whether the foregoing explanation accounts for their being filled. All of this secondary construction could have been performed either before or after the third story was built.

Minor secondary construction in the second story involved the blocking of the doorway between Rooms 49 and 51 (fig. 174), the opening of a doorway through the outer wall of Room 49 (see p. 98), and the blocking of the outer entrance to Passage 2.

(6) The rebuilding of the second flight of the main stairway (fig. 176a), which involved the addition of balustrades, seems best explained as fulfilling the desire for a change in design. It appears evident that this later staircase was not built until the elevated third-story landing had been constructed and the third flight to the top story was either being built or had been completed. It seems probable that the design of the third flight with balustrades brought about the addition of balustrades to the first flight and the rebuilding of the second flight with balustrades. This would have been relatively late in the history of Structure 2B1.

(7) The failure to complete the second flight of the north stairway (see p. 95) suggests that this was the final building operation carried on at Structure 2B1.

Structure 2B5

Good-sized building unusual in that upper floor rests at half-story height. No details of substructural platform recorded. Apparently approached from east by small stairway (fig. 164). Chultun in terrace before building.

SUPERSTRUCTURE

(fig. 211)

Plan. See figure 212.

Sections. See figure 213.

Elevation. See figure 214. Largely restored.

Base Molding. Typical three-member molding with colonnettes in middle number at front of first story (fig. 215). Presumably runs all around building. Now mostly buried (see Floors, below).

Base Molding at front of second story almost identical to that of first story (figs. 214, 217b).

Stairway. Upper part fallen and remainder deeply buried beneath debris (fig. 211). Unusual in rising only to height of medial molding of first story and leading to second-story room that is actually a half-story (figs. 212–214). Judging from fallen stones, risers .22–.24 m high.

Floors. Secondary or tertiary platform at front of building and probably at sides and rear (figs. 212, 213a); buries two lower members of base molding. Below platform is floor at level of top of lowest member of base molding (fig. 215). Possibly third floor in normal position at bottom of base molding, but this not certain.

Usual rise in floor level from front to rear rooms (fig. 213a).

Walls. Facing stone large but only fairly well dressed on outer-wall surfaces and poorly dressed on interior surfaces (figs. 216, 218). Rear wall of Room 1 faced with interior variety of stone although most walls with entrance to inner room have exterior variety of facing stone. Some tendency to inset course below spring of vault (fig. 216).

Walls run about .58 m thick at jambs and flare to about .70 m at corners of rooms. Transverse walls between rooms tend to be somewhat thicker but not invariably so.

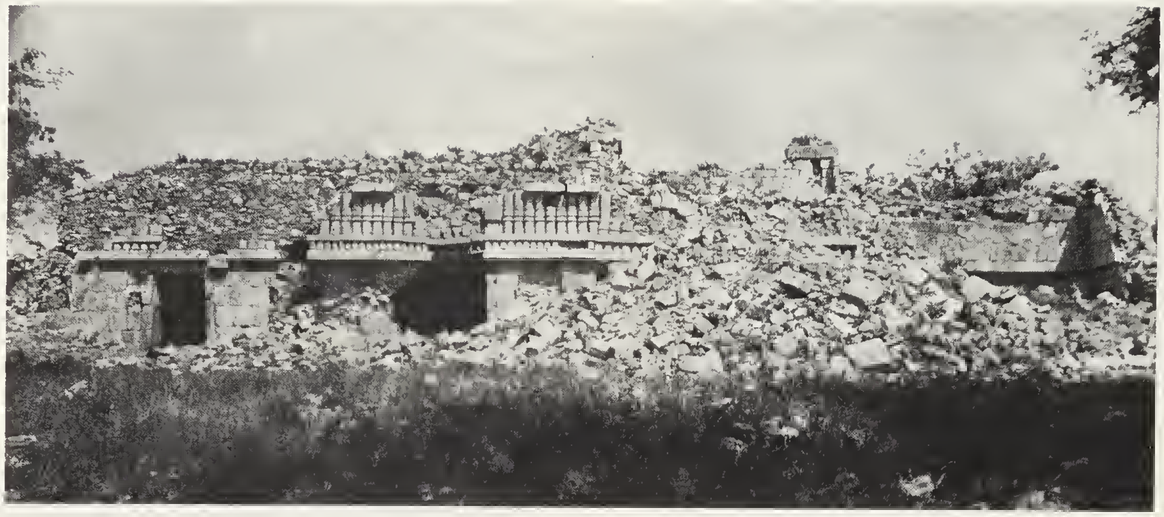


Figure 211. Sayil, Structure 2B5, looking west. Pile of debris before building represents remains of stairway and second story.

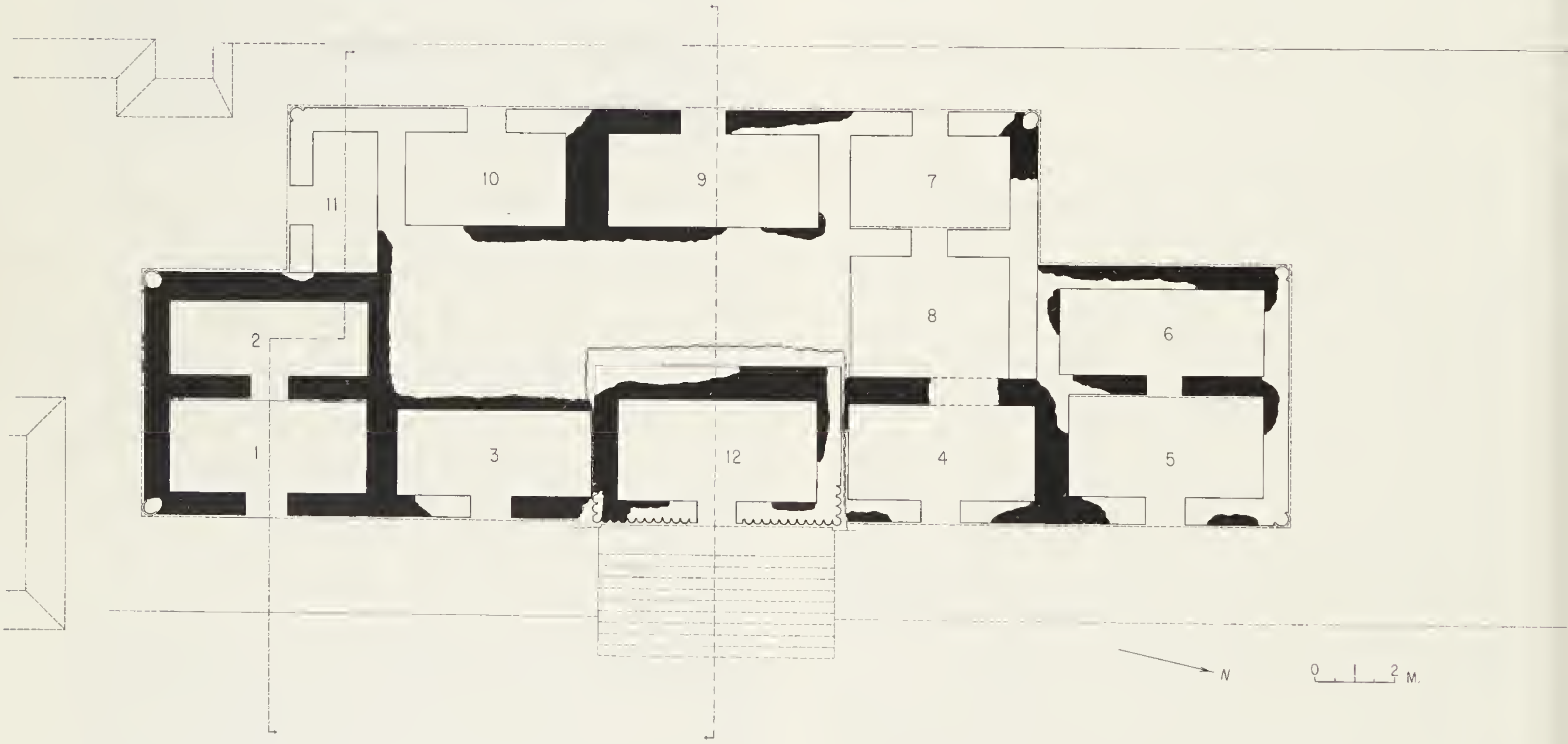


Figure 212. Sayil. Plan of Structure 2B5.

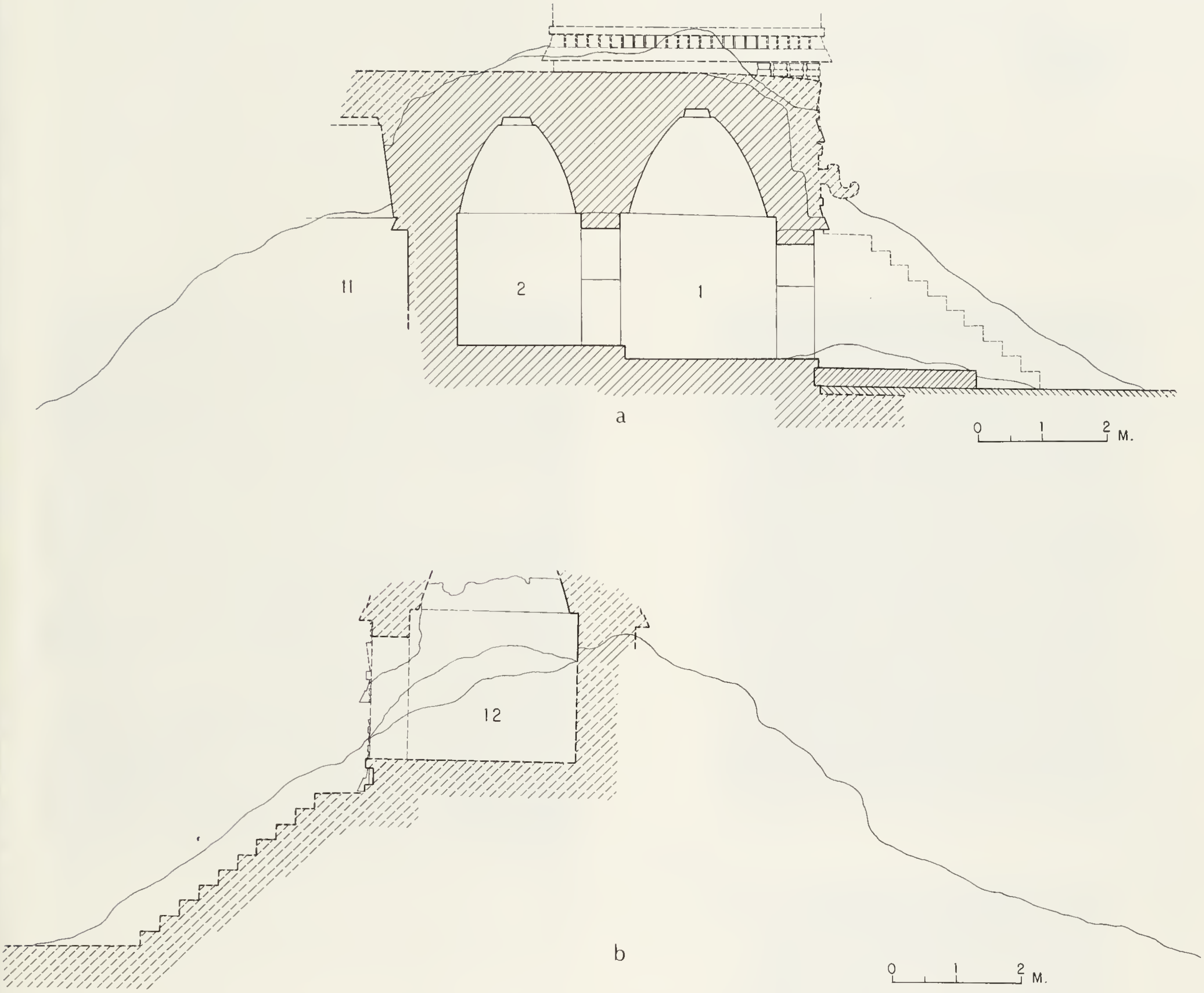


Figure 213. Sayil, Structure 2B5: a, section through Rooms 1, 2, 11 (see fig. 212); b, section through stairway and Rooms 9, 12 (see fig. 212).

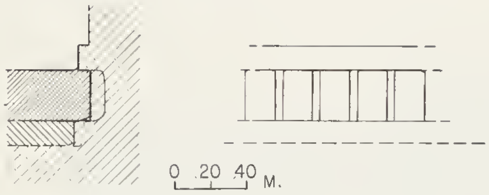


Figure 215. Sayil, Structure 2B5, first story. Section and elevation of base molding, largely hidden by later floors.

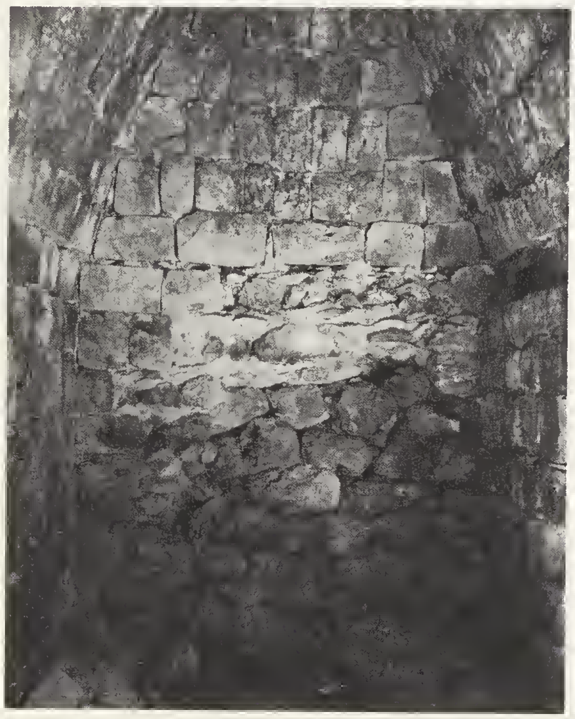


Figure 216. Sayil, Structure 2B5. Room 3, looking north, and showing end wall from which facing stone has fallen, exposing loose fill topped by tight fill beneath second story. Note poor quality of facing stone and inset course below spring of vault.

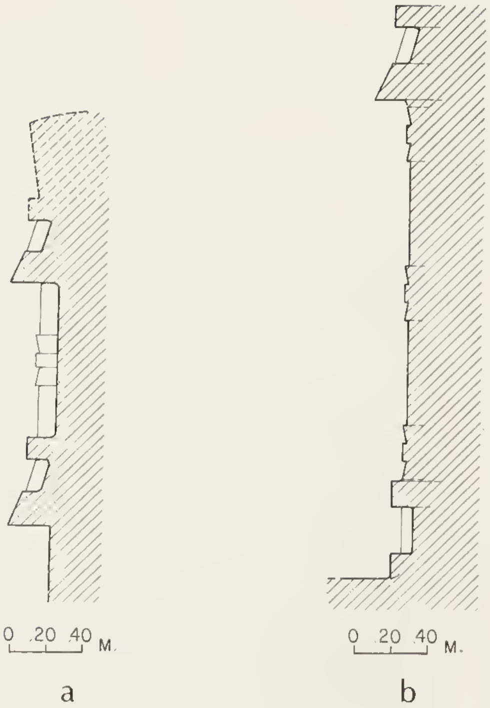


Figure 217. Sayil, Structure 2B5. Sections of moldings and facade decoration: a, upper facade zone of lower story; b, lower facade zone of upper story.

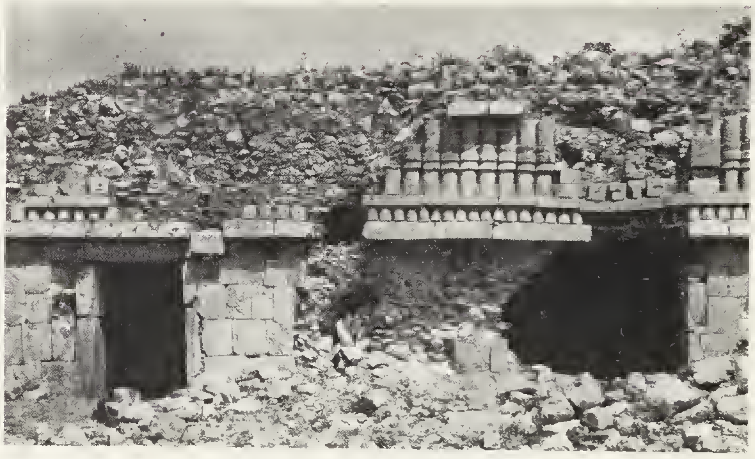


Figure 218. Sayil, Structure 2B5. View of part of eastern facade (Rooms 1 and 3), looking west, and showing remnants of masks over doorways and banded split columns between masks.

Doorways. Simple, with stone lintels, and narrow .10–.15 m at top (fig. 214). Full-width jamb stones, each jamb usually of two stones (figs. 213a, 218).

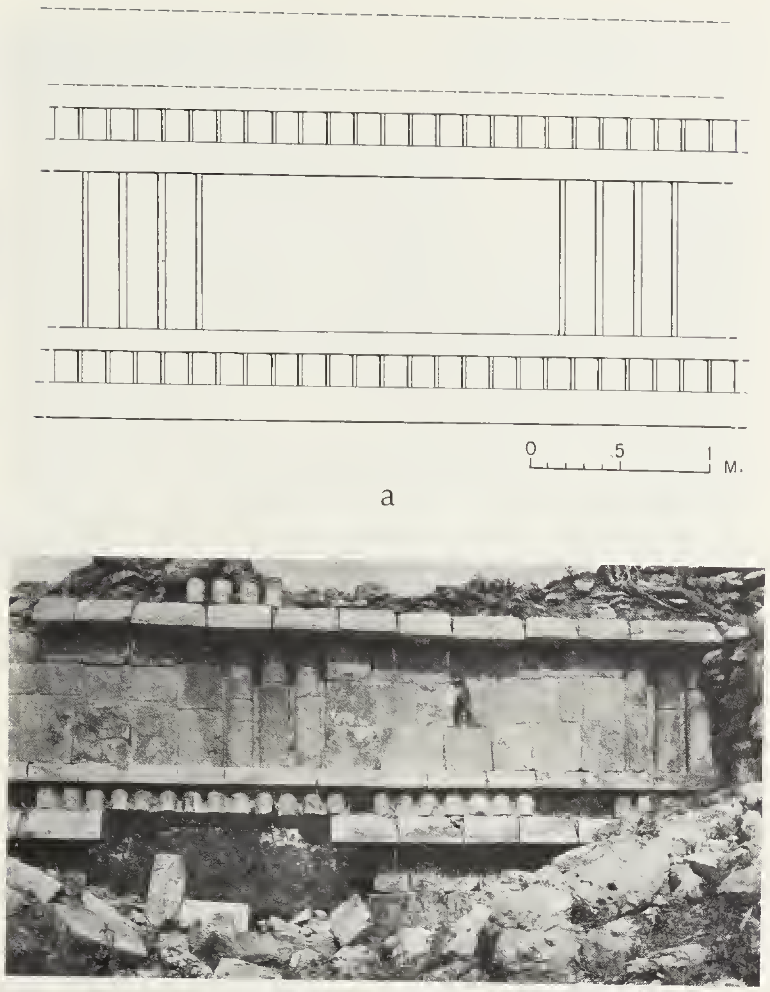
Wall Depressions. One-tongue and two-hole varieties of cordholders in usual position inside doorways.

Vaults and Beams. Usual curved soffit slopes of vaults (fig. 213a). Stone good sized, fairly well cut and fitted (fig. 216), high proportion of specialized form. Capstones well cut and fitted.

Usual two large beams below spring of vault, one at each end of room. Three or four small beams in course below small offset course at top of vaults.

Moldings. Three-member medial molding with colonnettes in middle member on first and second stories (figs. 214, 217–219). Cornice molding of first story probably same as medial molding with addition of coping course, but top two members nowhere in position. Cornice molding of second story assumed to be the same.

Decoration. Engaged column with round base and capital at each corner of first story (figs. 212, 214). Upper facade outside Rooms 1–3 carries banded split columns interrupted by mask over each doorway and probably a mask centered on south facade (figs. 214, 2. a, 218). Question whether this arrangement was repeated outside Rooms 4, 5, although restored the same in elevation. Outer rear wall of Room 6 carries groups of three plain split columns, separated by plain wall in upper facade zone (fig. 219). Upper-facade decoration outside Rooms 7 and 9–11 unknown.



a

b

Figure 219. Sayil, Structure 2B5. Upper zone of old western facade behind Room 4, apparently later included in Room 8: a, elevation; b, view of facade, looking east.

Lower wall zone of second story carries banded split columns across east facade (figs. 214, 217b). Row of topmost spools, which is above roof level of first story, carries around corners a short distance. Upper facade zone of second story fallen. Probably had mask over doorway.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Foundation for second story a loose fill of large rough stone with tight fill above beginning just below level of second-story base molding (fig. 216). Mortar of tight fill ties into mortar of first-story walls and junctures of these walls, foundation fill, and second-story walls show them as contemporary.

East end of vault in Room 11 springs from lowest member of old medial molding (fig. 213a), showing that lower rear wall of Room 2 was built before Room 11. There seems to be an old exterior wall face at the south of Room 6 that is now buried by the north wall of Room 8.

The implication is that the plans of Structure 2B5 were changed during the course of construction. Rooms 1–6 and the central fill for a second story were apparently encompassed in the original plan. Possibly Rooms 7, 9, 10 were included in this plan. As building progressed, Rooms 8 and 11 were added. Whether the second story was always planned as it finally stood, or whether a larger upper story was contemplated, cannot be said, but in final outcome the erection of the second story proceeded contemporaneously at least with the building of Room 3, and presumably with the building of Rooms 1–6.

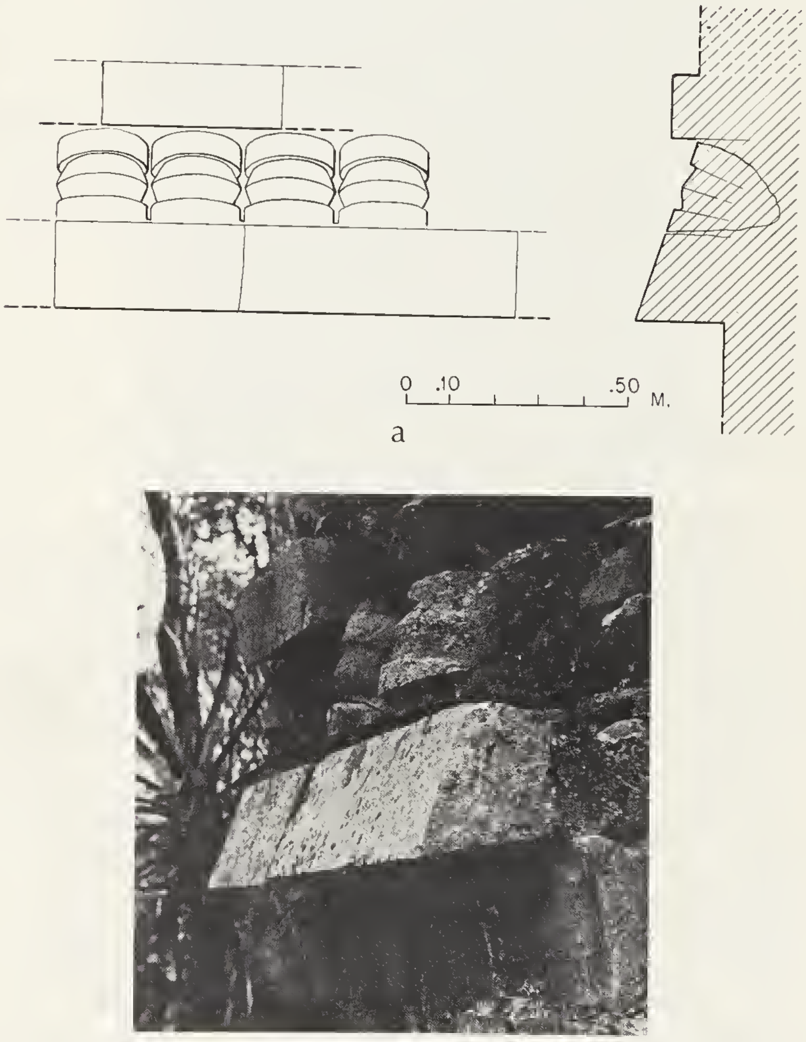
GROUP OF STRUCTURES 2C1–3

Small group of three badly fallen buildings, of which Structure 2C1 seems to have been the most important (fig. 164). Only fragmentary architectural details visible.

Structure 2C1

SUPERSTRUCTURE

Molding. Fragment of medial molding in place on rear (north) facade. Three-member type with spools in middle member (fig. 220).



a

b

Figure 220. Sayil, Structure 2C1. Medial molding: a, elevation and section of molding on north facade; b, molding, looking southeast.

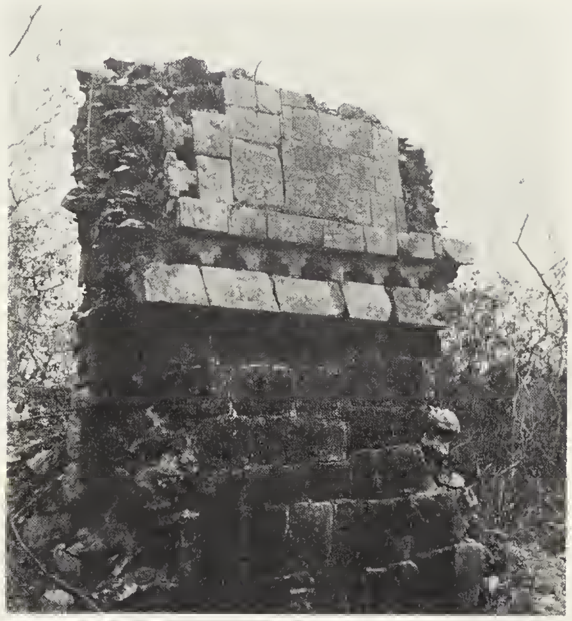


Figure 221. Sayil, Structure 2C2. View of west wall, looking southeast, and showing remains of medial molding and two decorative elements in upper wall zone.

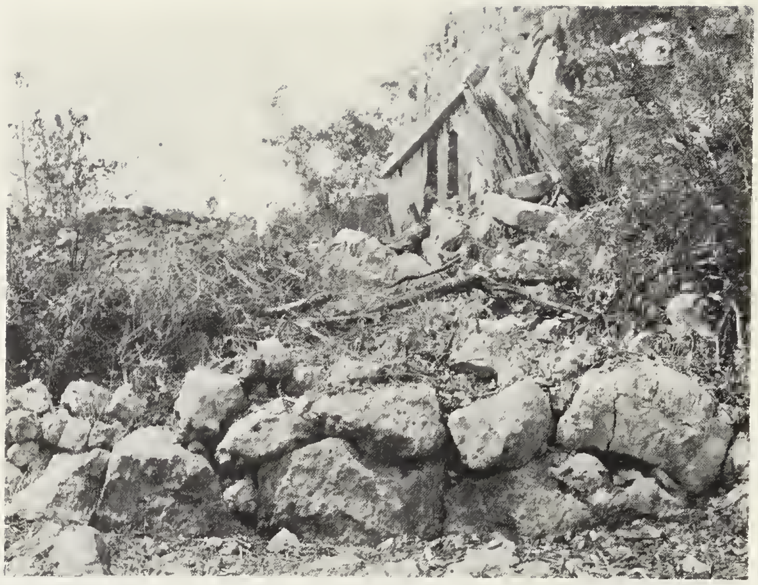


Figure 222. Sayil, Structure 2C4. South wall of substructural platform, looking north, with west facade of building in background.

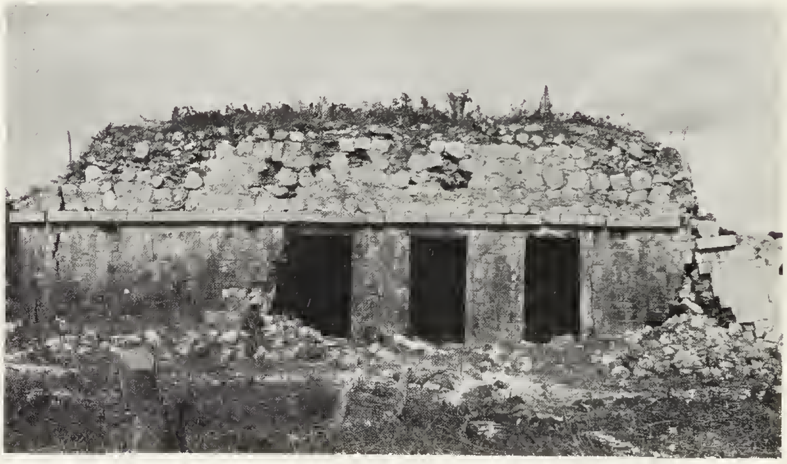


Figure 223. Sayil, Structure 2C4. West facade, looking east.

Structure 2C2

SUPERSTRUCTURE

Molding. Three-member medial molding with stepped elements in middle member at west end of structure (fig. 221). At rear (south) of building stepped elements replaced by plain course and molding has two members.

Structure 2C4

PLAN

See figure 164.

SUBSTRUCTURE

Construction. Structure rests on good-size platform with low retaining walls of large, rough, unshaped stone up to 1.30 m or more in length (fig. 222). Walls appear to be dry laid with no indication mortar was ever present.

No stairway observed, but approach was probably from south or west.

Altar 6 rests in front of building in court formed by Structure 2C4 and small neighboring structure (see Monuments, below).

SUPERSTRUCTURE

(fig. 223)

Plan and Section. See figure 224.

Base Molding. Simple molding of single course of stone .23 m high (fig. 224).

Walls. Outer walls .56 m thick at doorjambs and no flare toward ends of rooms. Transverse inner walls .82 m thick; between Rooms 1 and 3 medial wall .87 m thick. Course below spring of vaults not inset, but plaster cap present beneath medial molding.

Distinctive feature is small-stone masonry. Some regulation-sized facing stone in lower courses but mostly very small, probably averaging about .16 × .18 m on the face and some only .07 × .10 m (fig. 225). Stone moderately well dressed and fitted. Interior facing same as exterior (fig. 226).

Doorways. Masonry of doorjambs like that of walls but with cornerstones at edges (fig. 226). All lintels of stone. Some doorways narrow at top, others do not.

Wall sections between doorways to Room 1 are same width as doorways and actually amount to piers .56 × .99 m in plan (fig. 224).

Wall Openings. Number of small rectangular wall openings, varying from .10 × .10 m to .15 × .20 m in size, located in course below medial molding and second course below spring of vault (figs. 224–226). One opening at each end of Rooms 1 and 3, one at west end of

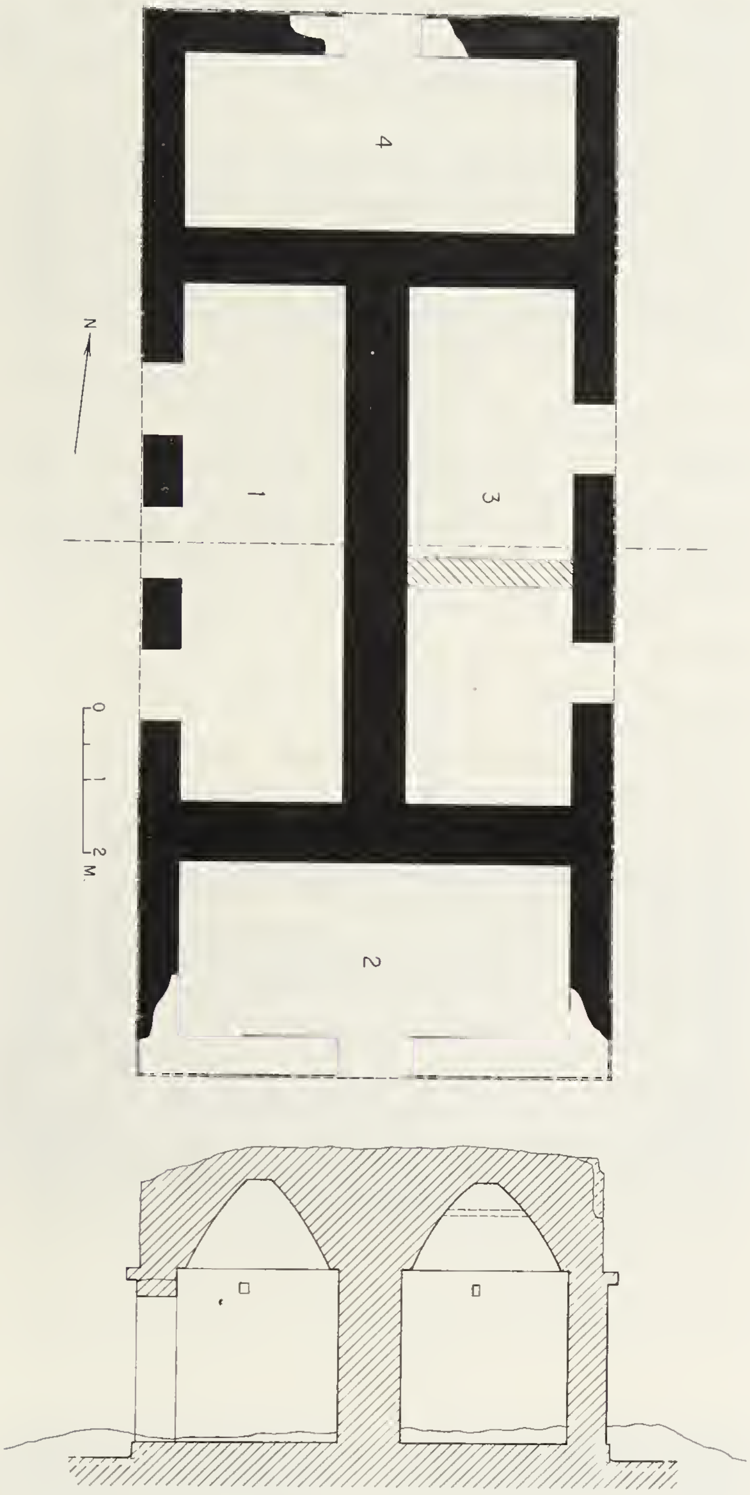


Figure 224. Sayil, Structure 2C4. Plan and section through Rooms 1 and 3.

Room 4, four in outer wall of Room 1, four in medial wall between Rooms 1 and 3, probably two in outer wall of Room 3, and probably two in outer wall of Room 2.

Several of these openings now plugged by insertion of cordholders and all may have been stopped in one way or another, but they were almost surely built as openings, since they are carefully bridged at top by capstones and some probably remained open.

Wall Depressions and Projections. Cordholders of two-tongue variety and ring variety made of rough stones with natural holes in them (cf. fig. 242a). Found in usual positions at sides of doorways, and below spring of vault at ends and sides of rooms.

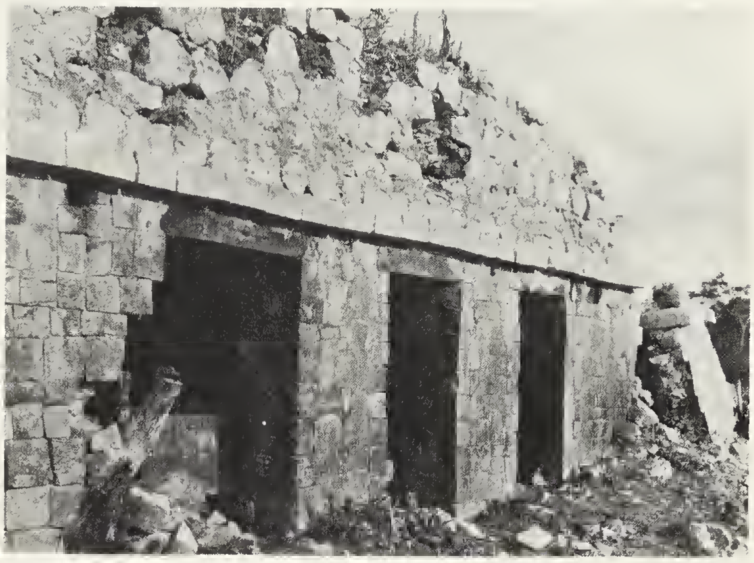


Figure 225. Sayil, Structure 2C4. View of west facade, looking southeast.

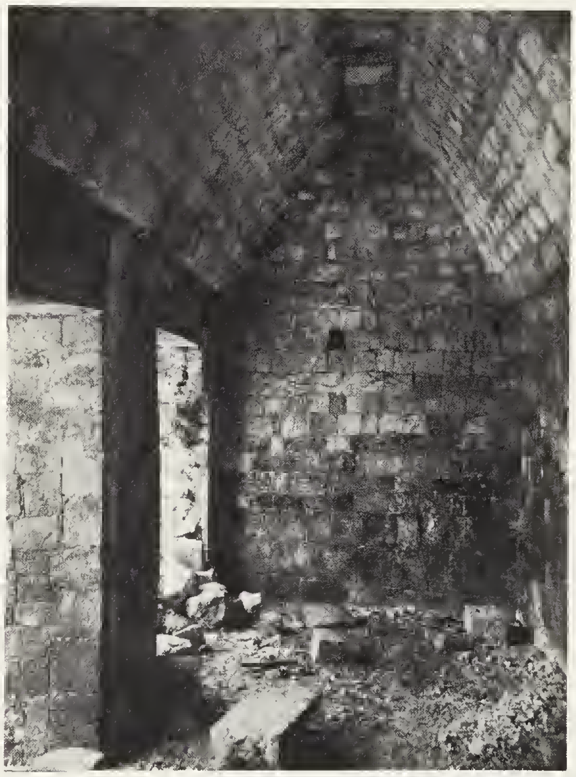


Figure 226. Sayil, Structure 2C4, Room 1, looking north, and showing construction of doorjambs, stone lintels, wall opening at end of room, and small wall and vault stone.

Vaults and Beams. Vaults rather low in proportion to width and no small offset beneath capstones (fig. 224). Ends of vaults carry more than normal inclination from vertical (fig. 227a).

Stones of vault small and comparable to facing stone of walls in this respect (fig. 226). Excepting spring course, a few stones about .30 × .20 m and .35 m deep, but average only about .18 × .15 m and grade down to a .12 × .10 m and .15 m deep. No specialized vault stone observed (fig. 228).

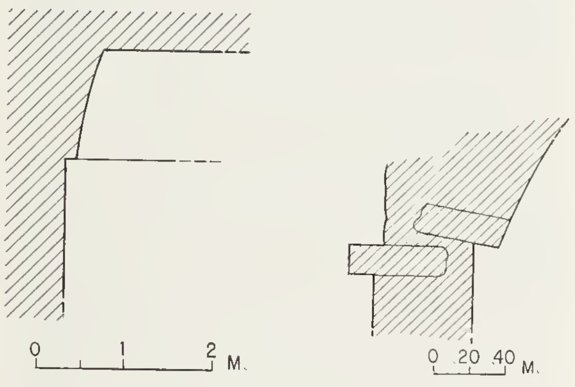
No vault beams in Room 1. Four small beams about two-thirds height of vault in Room 3. Three beams in second course below capstones in Room 4. May once have been beams in wall openings below spring of vault, but probably not.

Moldings. Simple string course all that remains of medial molding (figs. 224, 225, 227b). Upper wall above molding faced with roughly shaped but undressed stone that had been at least roughly plastered. No trace of cornice molding.

Not enough debris around building and too little cut stone to account for fallen upper facade. Question whether upper facade was left plain and unfinished or other members of medial molding and cornice molding were executed in stucco. Most likely left plain.

Roof. Remains of normal .10–.15 m thick roof cap.

Decoration. No cut stone decoration in position and none found in debris. No stucco decoration observed in debris.



a b

Figure 227. Sayil, Structure 2C4. Architectural details: a, section of end of room, showing greater than usual inclination from vertical of end of vault; b, section showing deeply tailed in spring course of vault, and primary course of medial molding surmounted by rough upper facade.

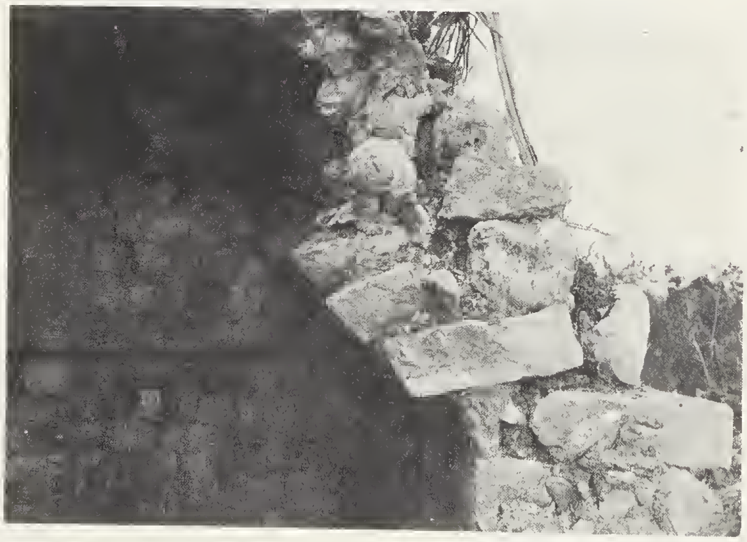


Figure 228. Sayil, Structure 2C4, Room 4, looking west, and showing north side of vault in section.

Traces of red paint on outer face of lintel over central doorway of Room 1 and on wall between central and southern doorways to this room.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Structure 2C4 seems to represent a single building operation but for a low secondary wall across the middle of Room 3 (fig. 224). Wall only one course high and no debris in room, but partition may have been carried higher with poles or other perishable construction.

GROUP OF STRUCTURES 3A1–4

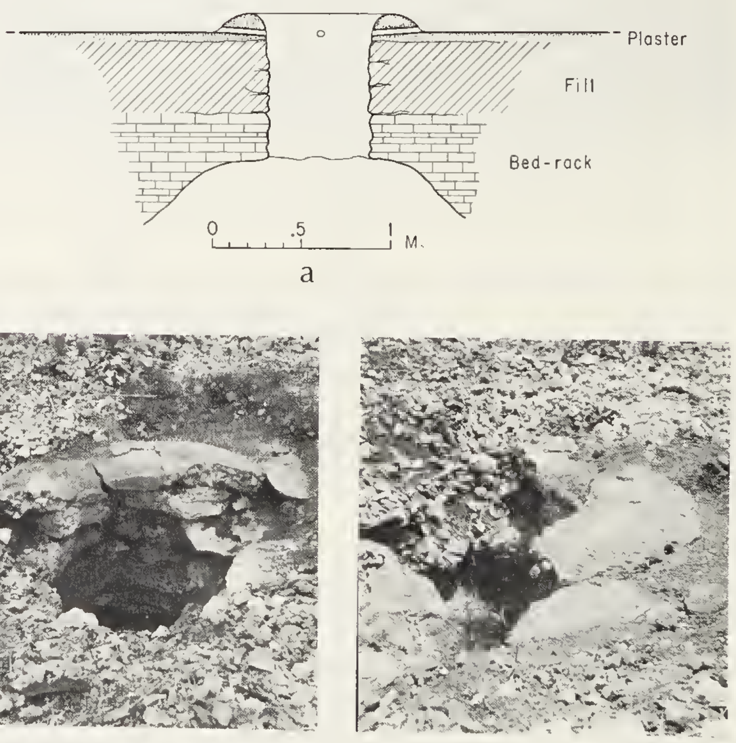
Small group of structures around adjacent courtyards.

PLAN AND SECTION

See figure 229.

CONSTRUCTION

All buildings badly fallen. Structure 3A3 was a vaulted building. Structure 3A1 apparently was vaulted, but presently is only a mound. Structure 3A2 had low masonry foundation walls that presumably supported perishable wall and roof construction and is of the dwelling type. Structure 3A4 is also of the dwelling type, as are the unnumbered mounds north of the court of Structures 3A1–3



a

b c

Figure 230. Sayil, Court of Structures 3A1–3. Mouth of chultun: a, section; b, view of neck, looking northeast, and showing remains of plaster collar around orifice; c, close-up of collar, showing small hole that allowed drainage of water into cistern.

(see fig. 164). There are two chultuns in the main courtyard, the floor of which is preserved at places, and four other such cisterns, two of them collapsed, elsewhere in the group.

Chultun. Orifice of northern chultun shows remains of low collar of plaster or stucco about .10 m high that once circled the opening (fig. 230). Collar is penetrated by holes .03 m in diameter, of which four were probably located at approximately the cardinal points, to allow water to drain into the cistern. Beneath collar and floor of court is .40 m of artificial fill that is faced with roughly cut stone to form neck of chultun, and beneath this is native limestone cap that was penetrated to excavate cistern. It is probable that sascab, a distintegrated limestone that took the place of sand in mortar for masonry (see Littmann 1958) was a by-product of most chultun construction.

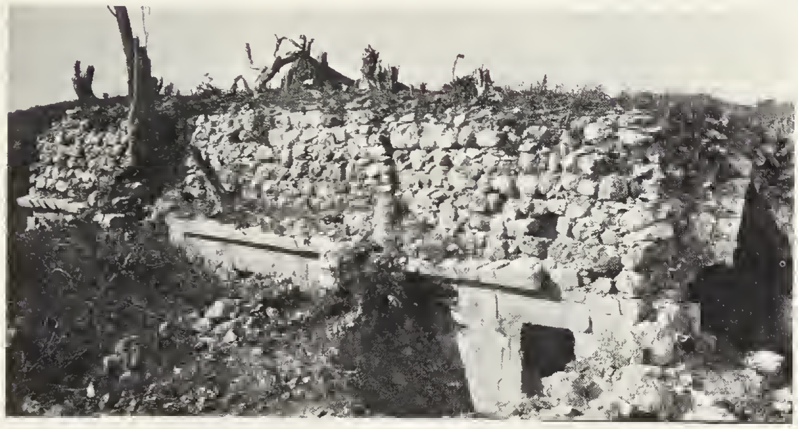


Figure 231. Sayil, Structure 3B1, looking southwest, and showing debris of collapsed front vaults (Rooms 1, 3, 5), medial wall largely buried by debris, and standing rear chambers (Rooms 2, 4, 6).

Structure 3B1

The three front chambers of this six-room building have collapsed, leaving the eastern face of the medial wall buried almost to the height of the spring of the vault (fig. 231). The doorway to Room 2 was partially excavated to reveal the hieroglyphs on the lintel and jambs. My notes deal primarily with this part of the building.

SUPERSTRUCTURE

Plan. See figure 232.

Floors. Light tan in color. Originally was rise in floor level from Room 1 to Room 2 (fig. 233) and presumably from other front-to-rear chambers. Later this step was buried by secondary floor.

Walls. Of well-cut stone averaging about .22 × .25 m on face. Medial wall .78 m thick at jambs, rear wall .58 m thick, south end wall .56 m.

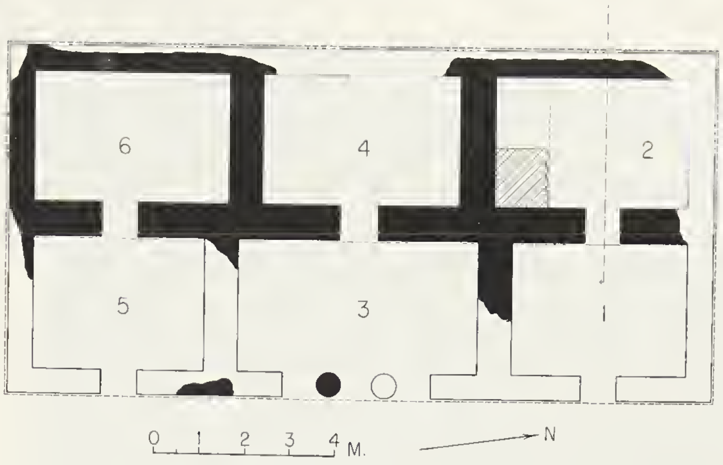


Figure 232. Sayil. Plan of Structure 3B1.

Doorways. Jambs built of two vertical courses of cornerstones (figs. 233, 236). Stone lintels, the one over doorway to Room 4 a tremendous stone .45 m thick. Doorways narrow at top. Entrance to Room 3 apparently employed columns (fig. 232).

Wall Openings. Small openings in wall between Rooms 2 and 4 (see fig. 233).

Wall Depressions. Cordholders of tongue-at-corner, tongue-at-side, two-tongue, and two-hole varieties (fig. 234). Located inside of doorways just below level of lintels.

Bench. At south end of Room 2 (fig. 232). Stood .54 m above original floor level (fig. 233). Projecting half-round molding across front with two colonnettes and fluted spool in place below molding. Half of bench destroyed and rest of decoration missing.

Vaults and Beams. Less than normal curve to soffit slopes (fig. 233). Beautifully cut, faced, and fitted vault stone that is not specialized in shape (fig. 235). Stone runs about .30 m square. Small offset beneath capstones unusual in utilizing specialized stones with bladelike edges .20–.55 m wide (fig. 233). Capstones large and well faced.

Rough backing of rear vaults (Rooms 2, 4, 6) largely in place (fig. 231). Spring course of front vaults tailed into masonry of rear vaults and still mostly in place in spite of fall of front vaults.

Small beam holes in top course of vault, one hole near each end of each rear room.

Molding. Small section of simple rectangular medial molding in place at south end of building. Restored at west in section (fig. 233).

Roof. Considerable amount of final plaster roof cap about .05 m thick still in place.

Decoration. No upper facade standing, but split columns that presumably decorated this area are in debris. Other decoration on face of bench in Room 2 (see above) and hieroglyphic band around doorway to that room (fig. 236).

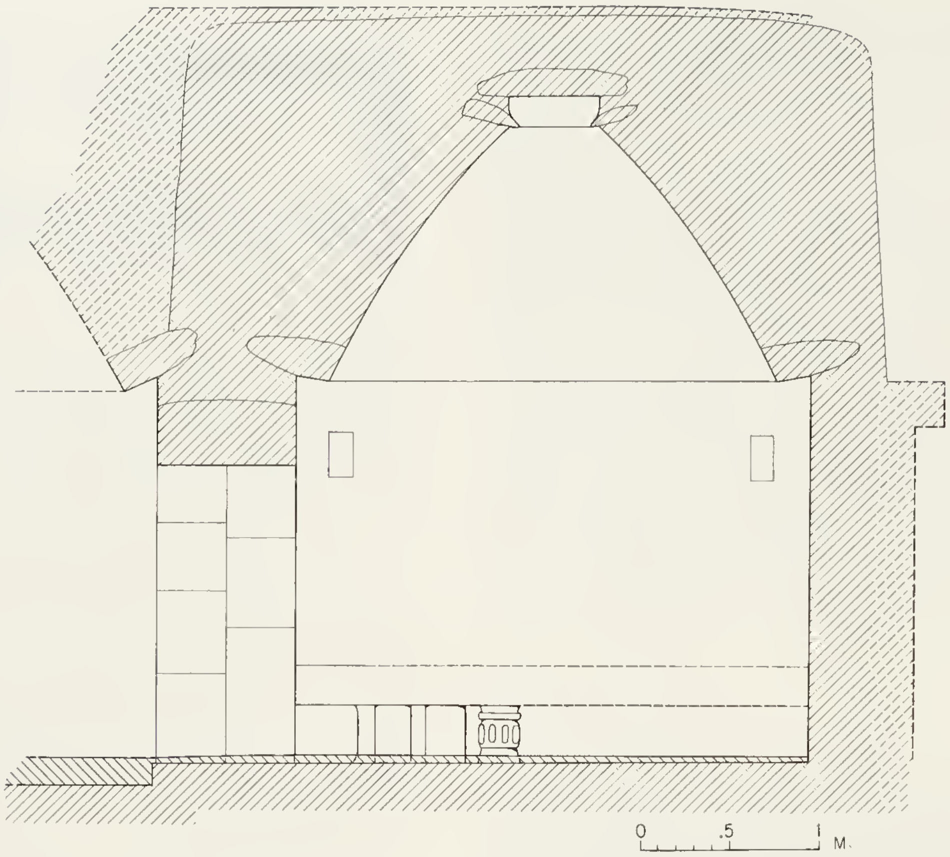


Figure 233. Sayil, Structure 3B1. Section through Room 2.

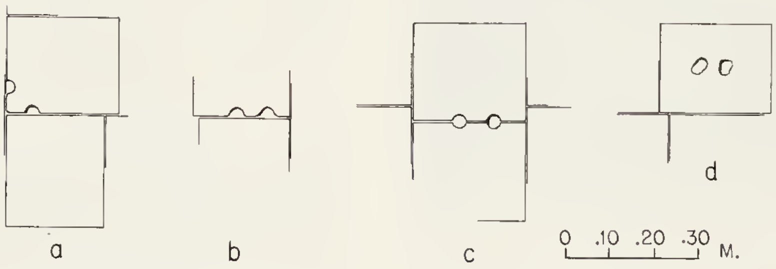


Figure 234. Sayil, Structure 3B1. Varieties of cordholders: a, tongue-at-corner; b, tongue-at-side; c, two-tongue; d, two-hole.

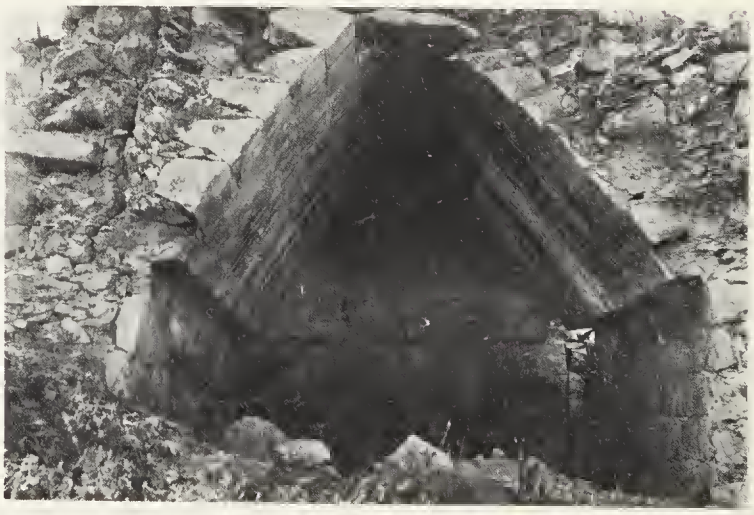


Figure 235. Sayil, Structure 3B1. Room 2, looking south, and showing vault in section.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Spring course on west side of vaults over Rooms 1, 3, 5 firmly tailed into rough masonry backing of vaults over Rooms 2, 4, 6 (figs. 231, 233). Clearly shows vaults over rear rooms erected prior to those over front rooms. Some indication vault over each room was built separately before proceding to next. None of this indicates change in plan or design of structure but merely reflects method of building.

Secondary floor in Rooms 1, 2 (see above) may have been to eliminate step-up to Room 2, but more likely provided broad step in Room 1 (floor of room not excavated).

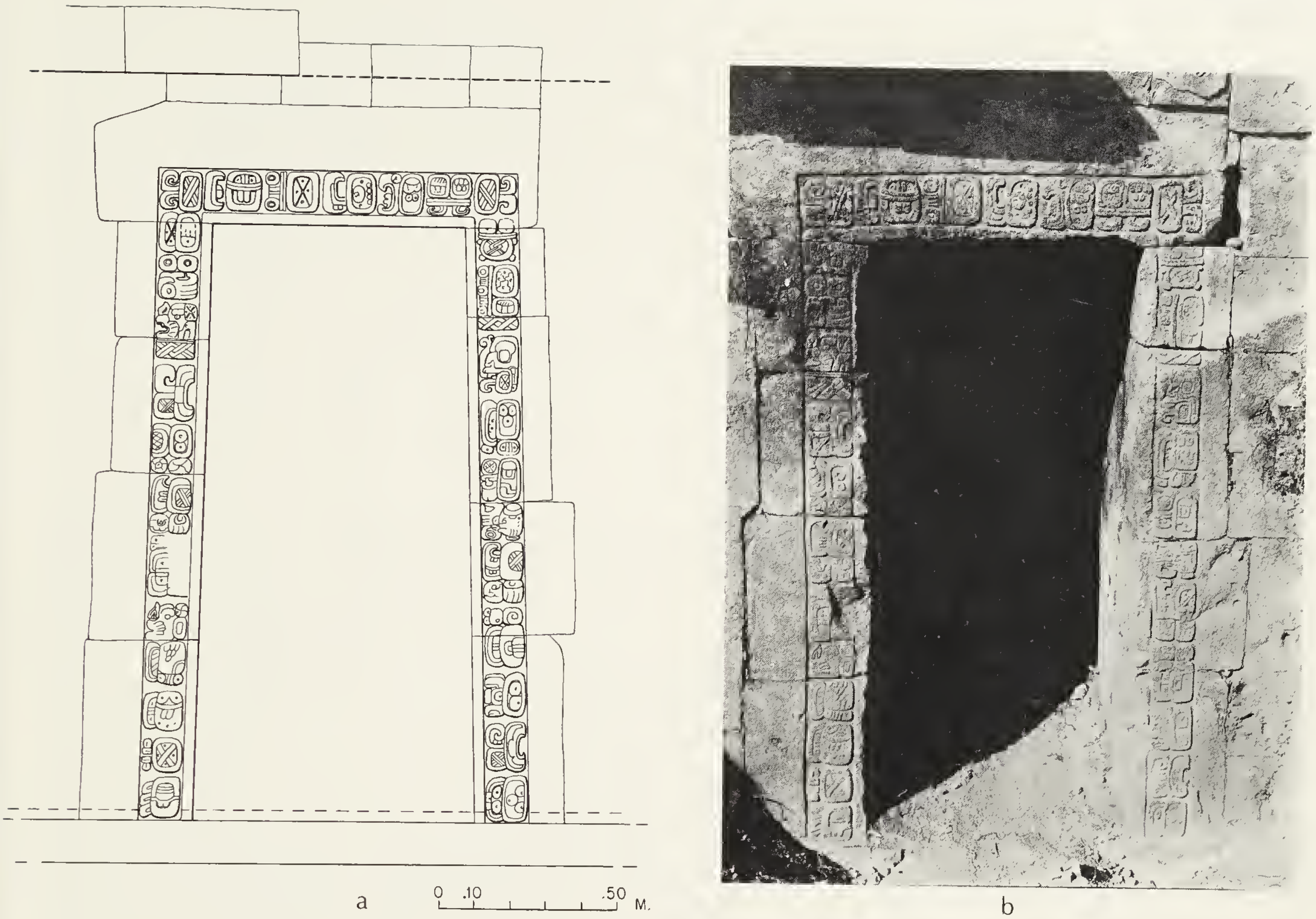


Figure 236. Sayil, Structure 3B1. Doorway to Room 2: a, elevation drawing showing glyphic band around doorway; b, view of doorway and hieroglyphs, looking west.

GROUP OF STRUCTURE 3B2

Central of three major architectural assemblages at Sayil. Consisting of a series of connecting courts (fig. 164), group is approached from north by causeway running south from northern major architectural complex (Str. 2B1), and approached from south by causeway that terminates at southern major assemblage (Str. 4B2). Principal structure, a temple, faces south.

Group surrounded by relatively level ground, but artificial leveling and terracing has created variations in court levels, and these probably reflect minor irregularities of the underlying terrain.

Nine chultuns were observed in or adjacent to the group.

No less than six altars (A7–12) were found associated with this group, Altar 9 resting in the most prominent position at the center of the courtyard before Structure 3B2. Three other altars (A13–15) and Stela 9 are located a short distance southeast of the group (see Monuments, below).

Structure 3B2

(Temple, Temple with the Crowning Wall, Mirador)

PLAN AND SECTION

See figures 237, 238.

SUBSTRUCTURE

Stairway. Completely fallen or covered with debris. Suggestion of four broad steps at bottom (figs. 237, 238).

Construction. Small part of retaining wall that is visible appears vertical but probably carried some batter originally. Height of substructure suggests terracing but none visible.

Masonry very crude, even rough shaping of stone minimal (fig. 239). Stone runs about .30–.40 m wide by .15–.20 m high by .40–.50 m deep. No signs of mortar but hard to see how such poor masonry could have stood any time if dry laid.

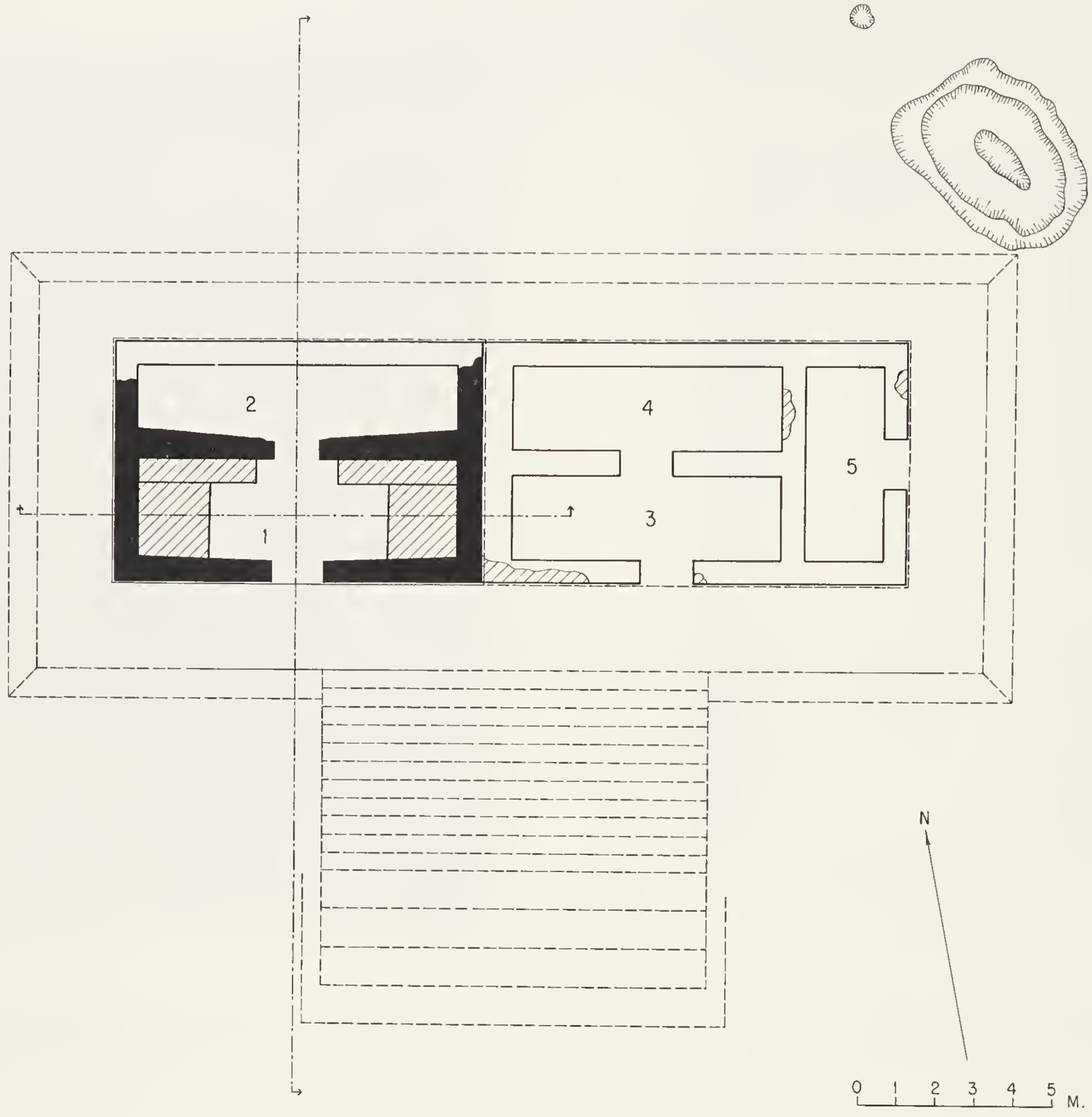


Figure 237. Sayil. Plan of Structure 3B2.

SUPERSTRUCTURE

Only western part of building (Rooms 1, 2) is standing and offers any architectural detail.

Plan. See figure 237.

Section. See figure 238.

Base Molding. Simple course of dressed stone .33 m high (fig. 238).

Floor. Fragment of usual tan floor showing. No rise in floor level in rear room (Room 2).

Walls. Outer facing of only moderately well-cut and dressed stone (fig. 240a) and inner facing distinctly poor. Much of north face of medial wall between Rooms 1 and 2 made of rough, undressed, and poorly shaped stone. Walls relatively light (.46–.55 m thick) at jambs but have pronounced flare toward corners of rooms (see fig. 237).

Doorways. Lintels of stone. Jambs of outer doorway (Room 1) built of two vertical courses of cornerstones with small stone and mortar between (fig. 238); jambs of inner doorway of full-width stones and corbels beneath lintels (figs. 238, 241).

Wall Depressions and Projections. Crude ring cord-holder (fig. 242a) in inner-wall face just east of lintel of outer doorway to Room 1. Stone rings just beneath capstones at either end of Room 1 (figs. 241, 242b).

Vaults and Beams. Mediocre vaulting in Room 1 with usual large stone in spring course at level immediately above medial molding. Vault stone not specialized and rather deeply set (fig. 243). Small offset beneath capstones utilizes specialized stone of type seen in Structure 3B1 (fig. 233) on south side of vault but normal stone on north. Capstones rather well cut.

No offset at spring of vault of Room 2 and spring one course higher than in Room 1 (fig. 238). Vault stone smaller and even less well cut than in Room 1 (fig. 240b).

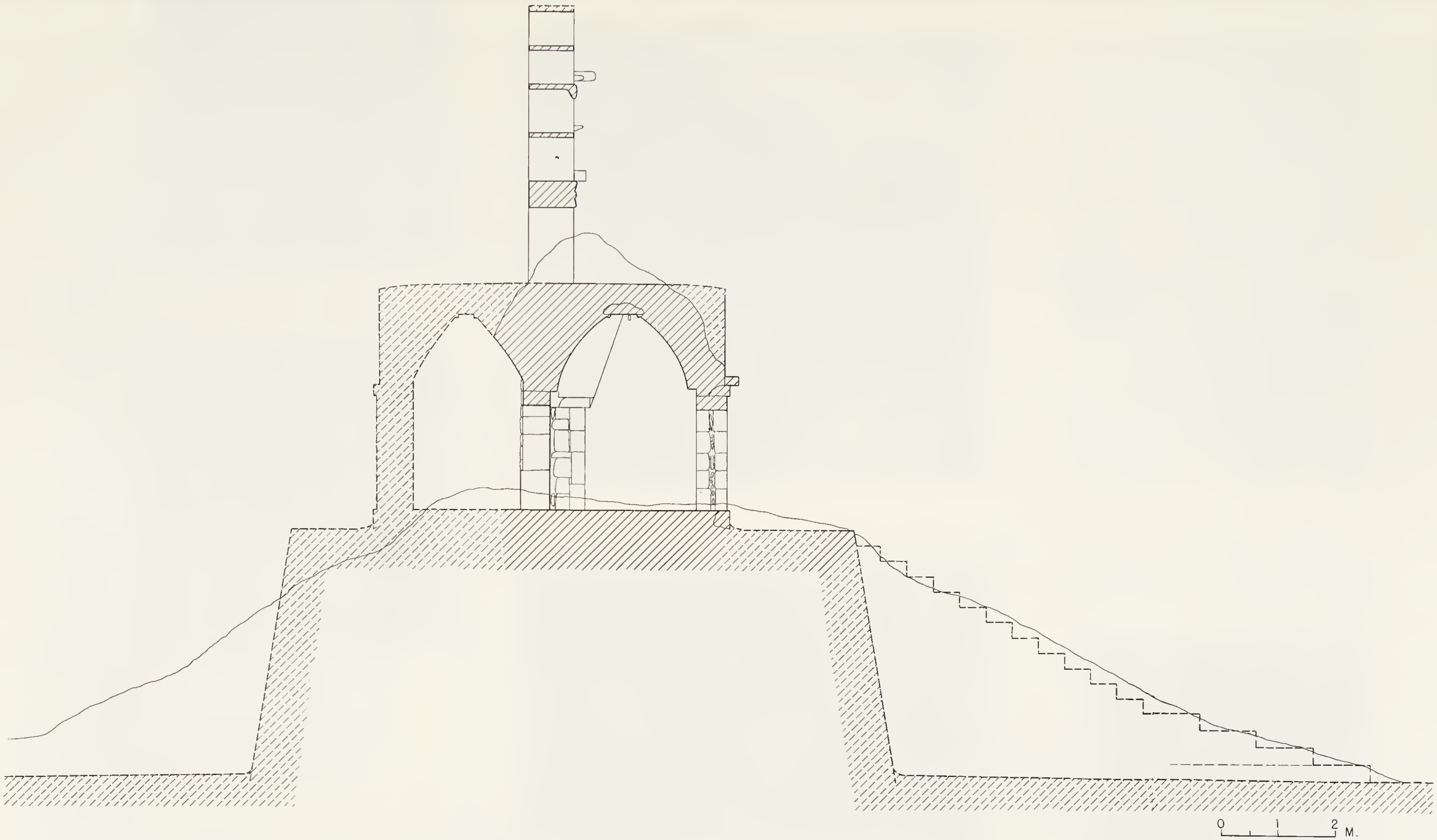


Figure 238. Sayil, Structure 3B2. Section through Rooms 1 and 2.

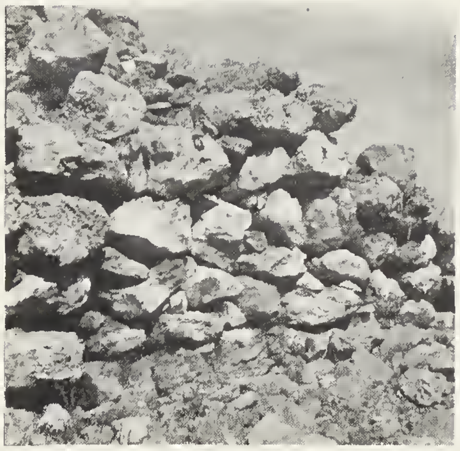


Figure 239. Sayil, Structure 3B2. Rough masonry of wall of substructure.

Only one beam hole, about two-thirds height of vault in Room 2, now visible.

Molding. Simple rectangular medial molding (fig. 240a). Projection of molding highly variable. Upper facade set slightly back of line of lower wall face (fig. 238).

No trace of cornice molding and question whether any existed.

Roof Structure. Roof comb of single wall, perforated variety, rests almost directly over, but slightly forward of, medial wall between Rooms 1 and 2 (figs. 238, 240). Extends only over west part of building (see Secondary Construction . . . , below) and stands at full width and approximately full height. Built of roughly shaped, slablike

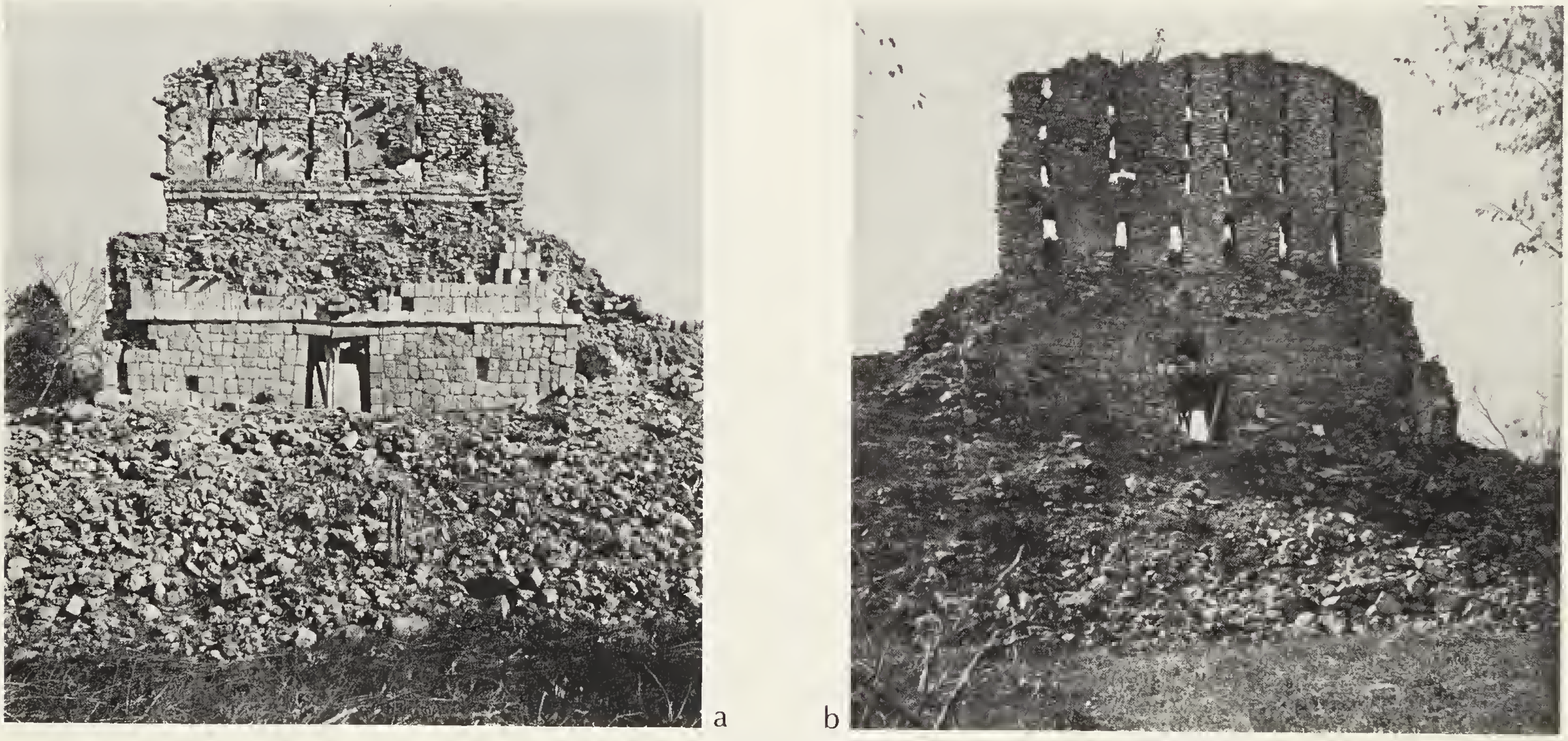


Figure 240. Sayil, Structure 3B2. Standing, western part of temple building: a, looking north at main facade; b, looking south at north face of medial wall, south soffit of vault in Room 2, and rear of roof comb. Note extremely crude wall masonry.

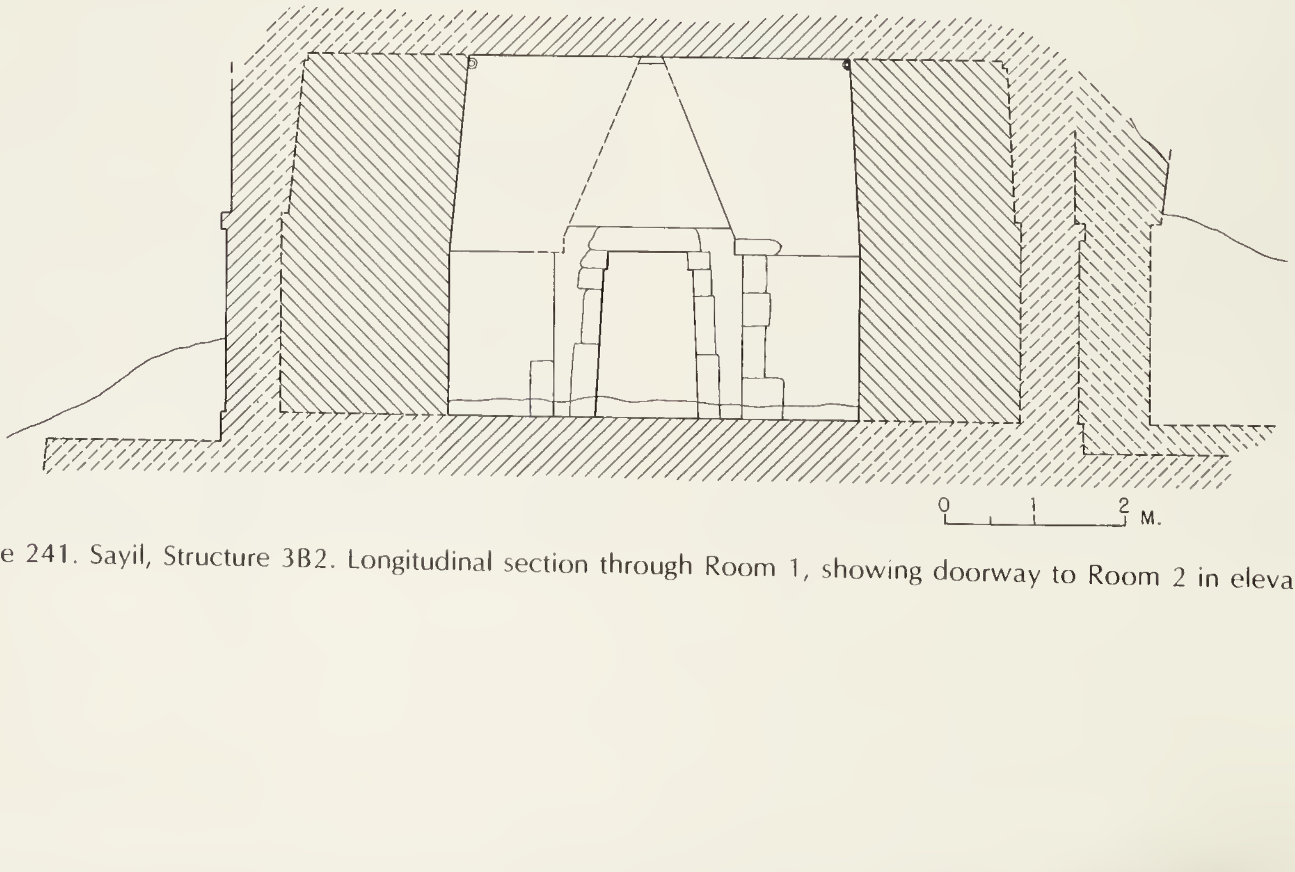


Figure 241. Sayil, Structure 3B2. Longitudinal section through Room 1, showing doorway to Room 2 in elevation.

stone covered with thick layer of plaster. Two or three capstones used as lintels above each window.

Three-member medial molding across front and at ends of roof comb about one-third way up (figs. 238, 240a). Molding modeled in stucco over projecting courses of rough stone (fig. 244). Inconspicuous molding of stucco two-thirds height of roof comb. Decoration on roof comb only at front and ends (see below).

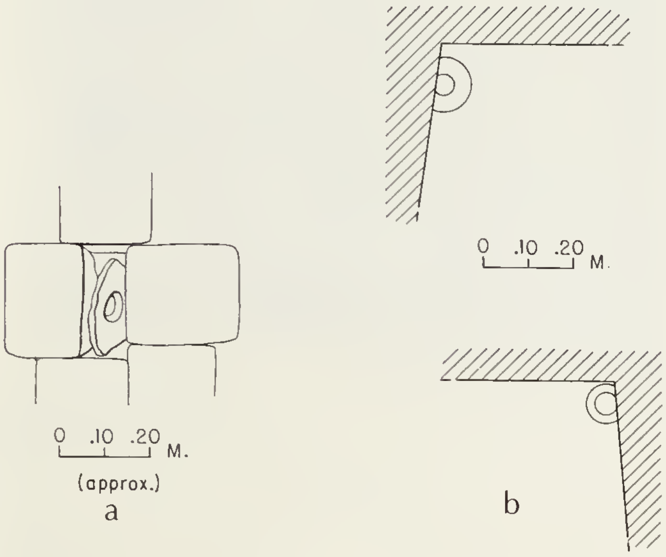


Figure 242. Sayil, Structure 3B2. Cordholders in Room 1: a, crudely fashioned stone ring inside south doorway; b, more normal ring variety of cordholders located at each end of vault.

Decoration. Projecting tenons that supported stucco and possibly stone decoration on upper facade and on roof comb (244a). Traces of anthropomorphic figures. Feet resting on top of lower molding on roof comb, and one leg still intact. Leg modeled in stucco around central core of stucco like flesh around bone. Probably large figure at each corner and at center of facade. Face on stone ring now broken (fig. 245), found in front of building and presumably fallen from above.

Molding on roof comb carries rosettelike decoration on middle member (fig. 244c) and feather motif on upper and lower members (fig. 244b). Traces of red, green, and blue paint on lower member.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Western part of superstructure (Rooms 1, 2) built first as shown by old exterior wall face, now buried, at east end of this part of building (figs. 237, 241). Facing of upper wall zone stands four courses above molding near center of buried wall, but no facing stone toward south. Eastern part of building (Rooms 3–5) either built prior to completion of upper wall zone of western part or some of facing stone taken down. Cannot be certain which occurred.

Secondary construction in Room 1, consisting of bracing walls and vault faces at north side of room and heavy blocks of masonry at each end of room (figs. 237, 238, 241), seem to be supports for roof comb, which partly

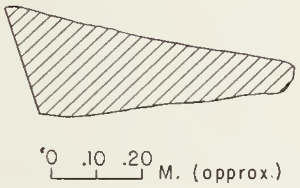


Figure 243. Sayil, Structure 3B2. Section of typical vault stone.

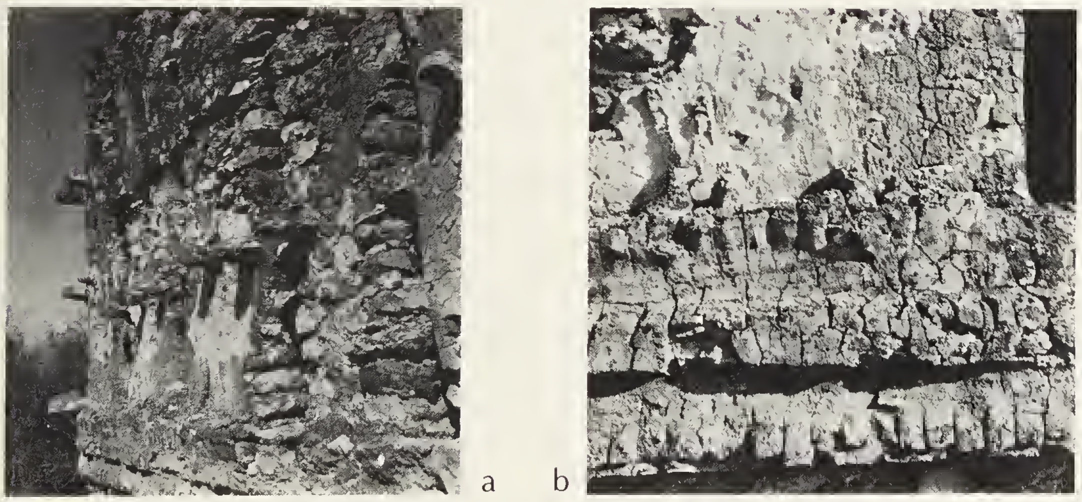
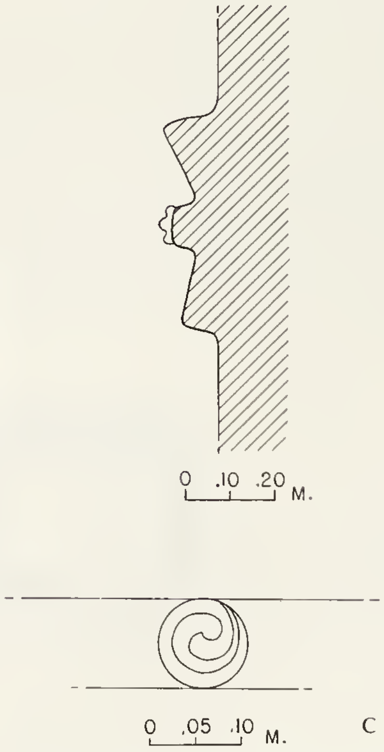



Figure 244. Sayil, Structure 3B2. Roof comb: a, western part of front (south face), looking northwest, and showing stucco moldings and projecting stone tenons that once supported stucco decoration; b, close view of lower molding, showing feather motif in stucco; c, section of lower molding and detail of rosettelike decoration on middle member.

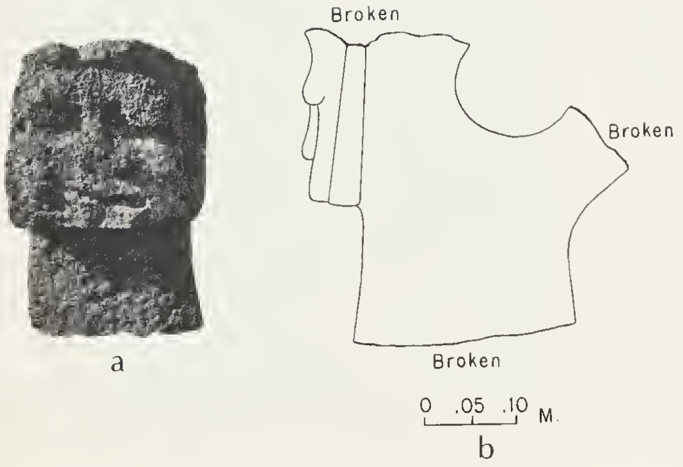


Figure 245. Sayil, Structure 3B2. Face on stone ring: a, front view; b, profile drawing.

overlays vault of Room 1. Ends of secondary walls and vault faces at either side of inner doorway finished with faced stone; remainder of secondary masonry extremely crude.

Roof comb stands as unit over western part of building. Eastern end of roof comb is complete, showing it did not extend further eastward. If there was roof structure over eastern part of building, it presumably stood separately from western roof comb.

Structure 3C1

SUPERSTRUCTURE

Plan. See figure 246.

Small building of four rooms of which one (Room 2) is standing. I have no record of this structure other than photographs and observation that east end of building (Rooms 3, 4) is secondary to west end (Rooms 1, 2).

Photographs (fig. 247) show excellent wall masonry, stone lintel, simple rectangular medial molding that rises over doorway, and decorative motif of triangular elements over lintel.

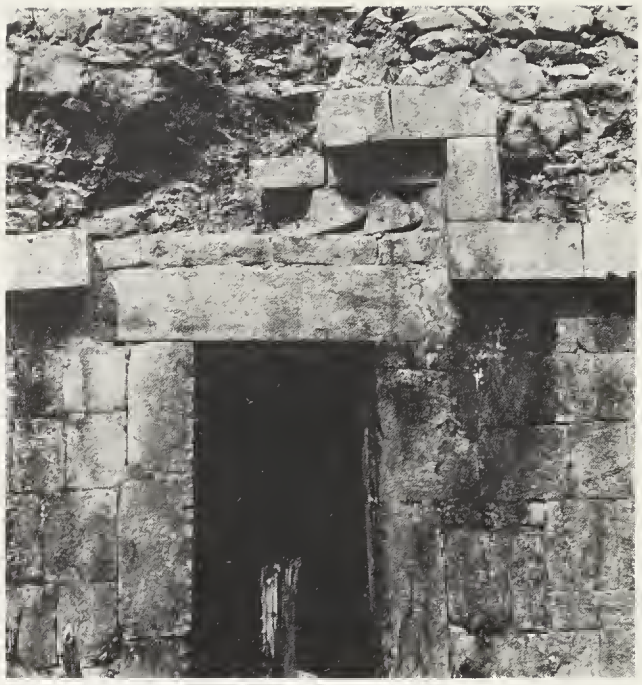


Figure 247. Sayil, Structure 3C1. Doorway to Room 2, looking north, and showing medial molding and decorative elements over doorway.

Structure 3C2

Structure on eastern side of closed court that is entered by causeway (fig. 164). Platform about 1.50 m high supports two fallen buildings. At rear center of platform and between buildings is interesting and unusual feature that appears to have been a shrine (fig. 248). Made of five well-shaped stones about .70 m high. No excavation carried on here.

Altars 16–18 associated with this group of structures (fig. 164).

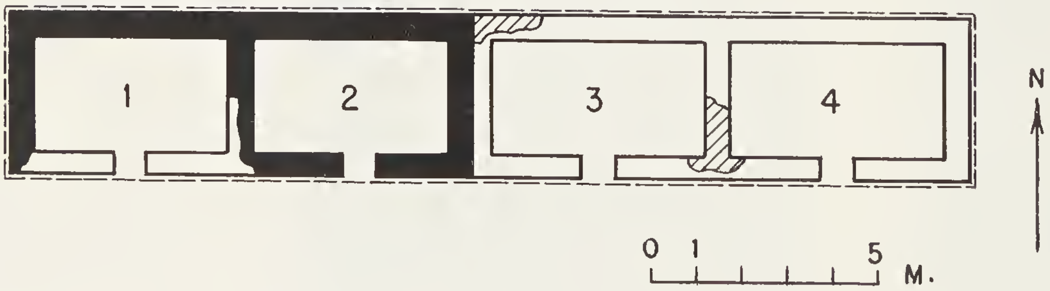


Figure 246. Sayil. Plan of Structure 3C1.

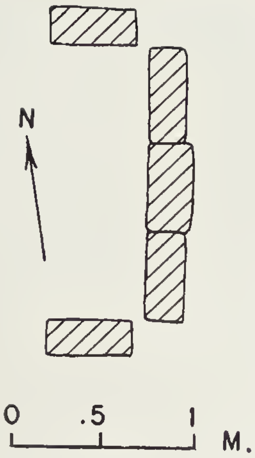


Figure 248. Sayil. Plan of shrine of Structure 3C2.

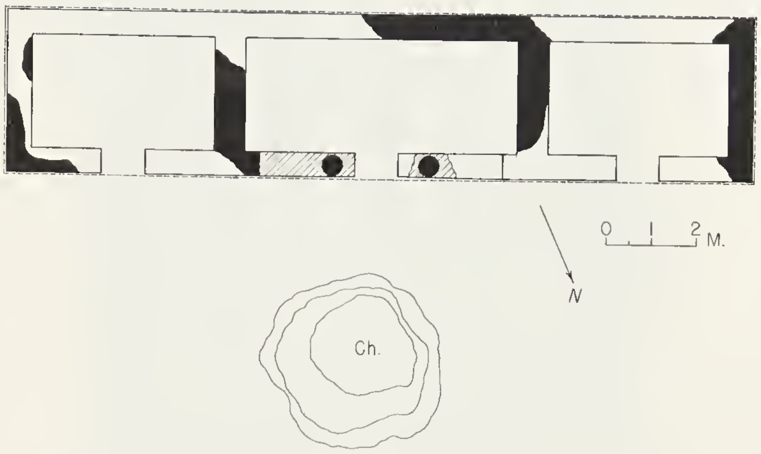


Figure 249. Sayil. Plan of Structure 4B1.

Structure 4B1

Badly fallen building that is notable for its sculpture. In front of building is caved-in chultun (fig. 164), and short distance northwest are remains of what probably was structure of dwelling type. Beneath latter, built into fill of platform supporting Structure 4B1, is subterranean vault (see below).

SUPERSTRUCTURE

I have few notes on building other than record of sculpture. Walls .52–.56 m thick and faced with well-cut stone. Vault entirely fallen. No specialized vault stone observed in debris. Medial molding almost surely had apron member though none in place. Rest of molding, if there were other members, and upper facade unknown.

Plan. See figure 249.

Elevation. See figure 250. Partly restored.

Doorways. Simple rectangular doorways with stone lintels in two end rooms. Center room originally had triple entrance with columns, capitals, corbels on jambs, and stone lintels. Secondary construction later blocked side doorways of triple entrance, encased the columns (fig. 251a), and left simple center doorway (figs. 249, 250). Three full-width stones formed east jamb of secondary doorway; single large stone topped by small stone formed west jamb.

Decoration. Fronts of columns, fronts and sides of capitals, entrance-side faces of corbels, front edges and undersides of lintels all sculptured in bas-relief (fig. 252). Carving exceptionally deep, much of it .02 m, at places .03 m, in depth.

Columns carry elaborately accoutered human figures with small subsidiary human figures at their feet (fig. 253; and see Proskouriakoff 1950, fig. 102f,g). Front of each capital shows mask design (fig. 254c,d), the same in each case, and sides of capitals and faces of corbels carry Tlaloc masks (see fig. 254a,b; and ibid., fig. 102e). Front edge of each lintel shows carving of death's-head mask with bands extending from eye sockets to ball-like objects resting in human hands (see fig. 255a; and ibid., fig. 102d). This suggests extruded eyeball motif seen elsewhere in Mesoamerican art (see J. E. S. Thompson 1948, pp. 25–26). Undersides of lintels carry deities, or human figures personifying deities, one leg of each figure ending in serpent in place of foot (fig. 255b-d; and see Proskouriakoff, 1950, fig. 102a–c). For a discussion of sculptural style, see ibid., p. 168.

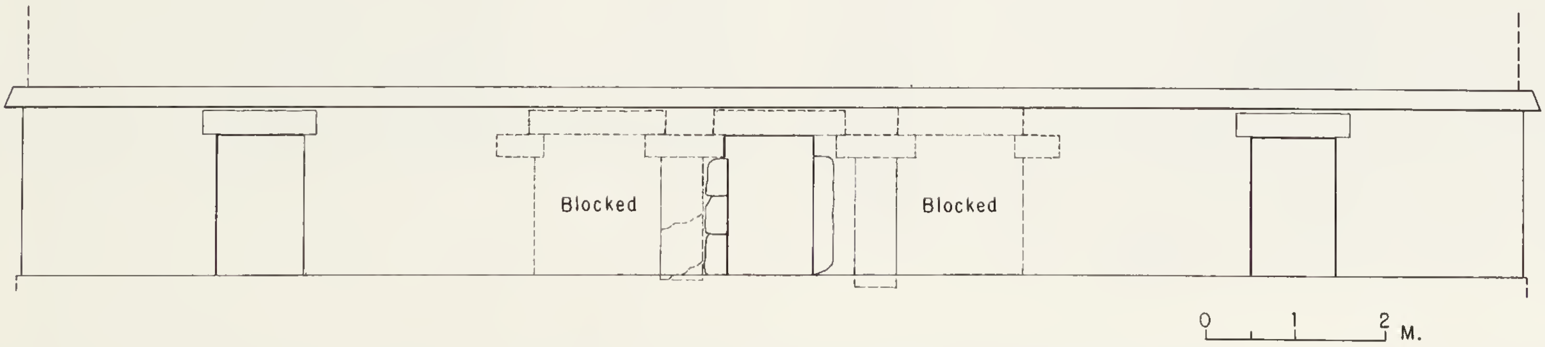


Figure 250. Sayil, Structure 4B1. Restored elevation of north facade.

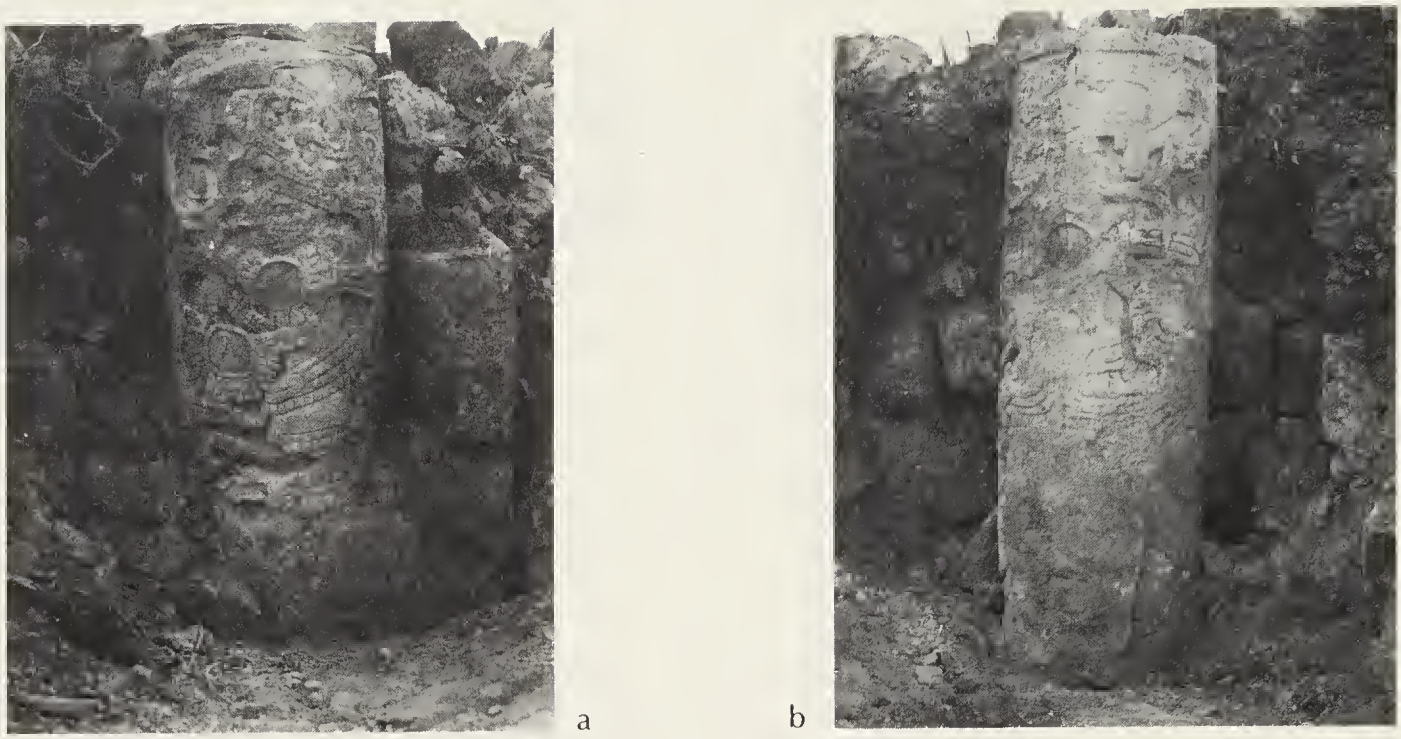


Figure 251. Sayil, Structure 4B1. Sculptured columns: a, eastern column, looking south, and showing secondary wall masonry that encased column; b, western column, looking south, and showing layer of hard plaster (bottom) that covered carving.

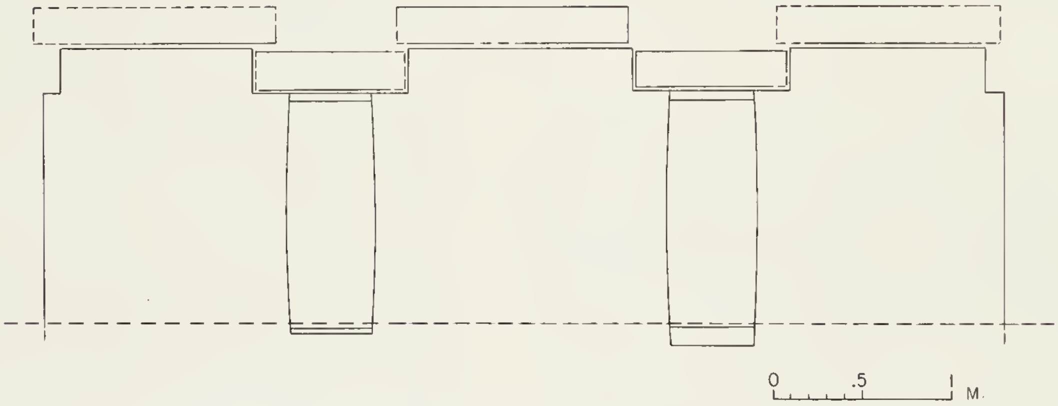


Figure 252. Sayil, Structure 4B1. Restored elevation of original central entrance, showing decorated areas (see figs. 253–255) on columns, capitals, and lintels.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Eastern column broken in two places (see fig. 250; and ibid., fig. 102f) and mended with mortar between joints caused by breaks. This presumably happened at time of construction of building. Later, all sculpture covered with layer of fine, smooth, very hard plaster (fig. 251b). Lastly, secondary walls were built, blocking side entrances, encasing columns, and forming single center doorway (figs. 249, 250). Question whether secondary construction was due to fear of failure of broken column.

SUBTERRANEAN VAULT

Just northwest of Structure 4B1, beneath remains of what appears to have been foundation for house of perishable wall and roof construction, is underground vault with square shaft-like opening and narrow entrance at one corner of chamber (fig. 256). Vault, which suggests tomb, surrounded by fill of large platform supporting Structure 4B1 and other buildings. No excavation was carried on.

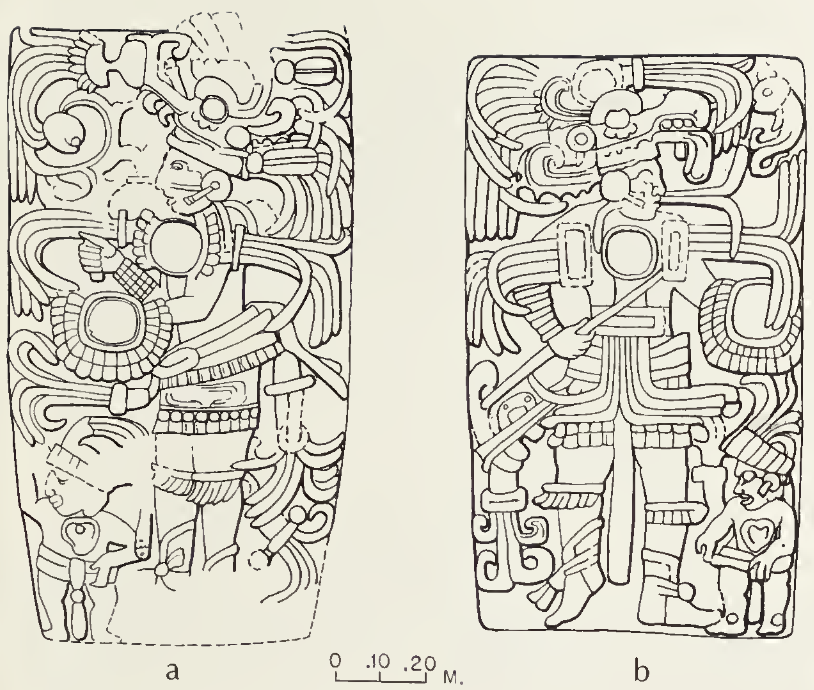


Figure 253. Sayil, Structure 4B1. Sculpture on columns: a, east column; b, west column.

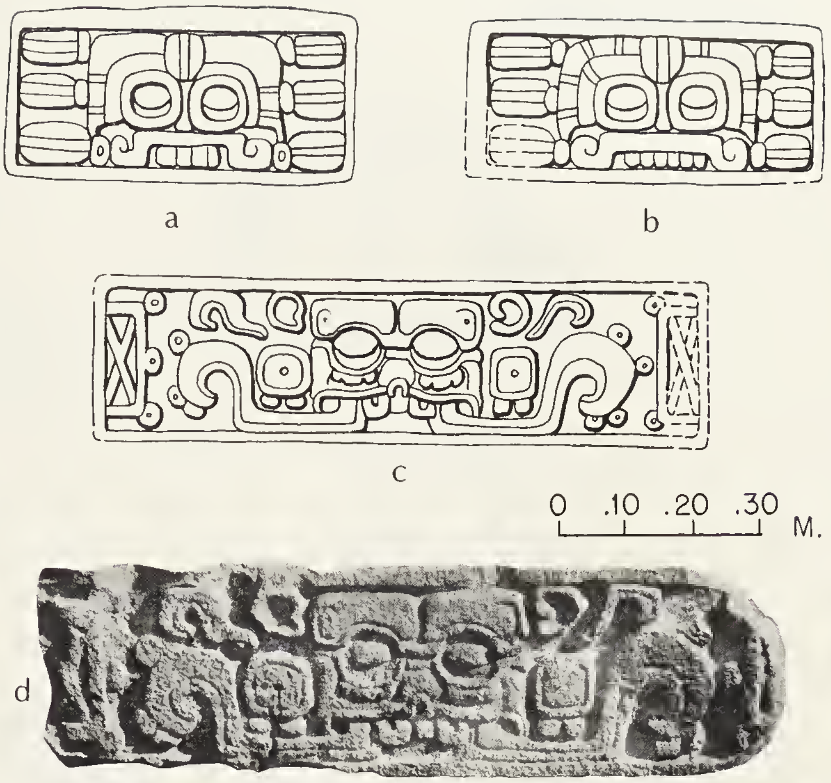


Figure 254. Sayil, Structure 4B1. Sculpture on capitals: a, east end of east capital; b, west end of west capital; c, d, front of east capital.

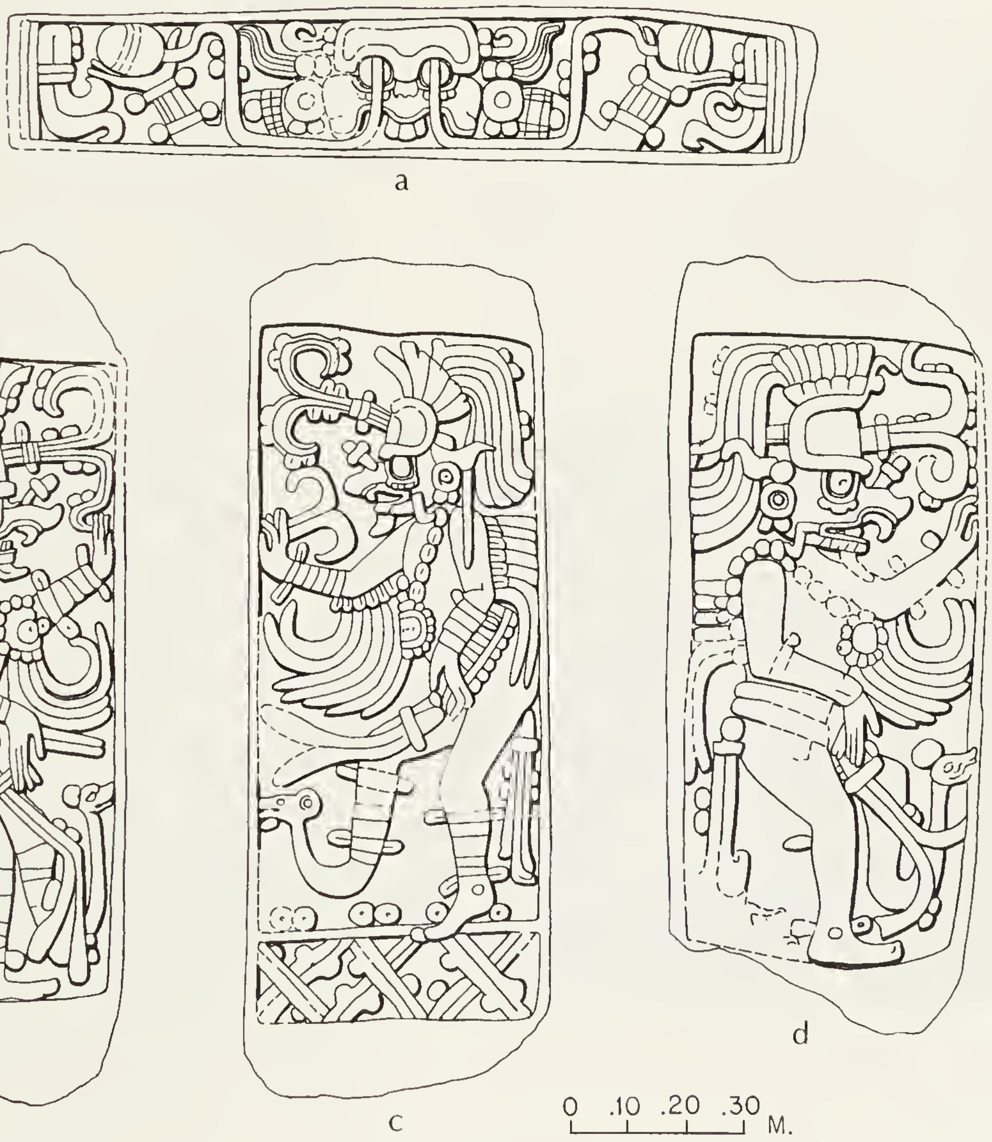


Figure 255. Sayil, Structure 4B1. Sculpture on lintels: a, front edge of center lintel; b, underside of east lintel; c, underside of center lintel; d, underside of west lintel.

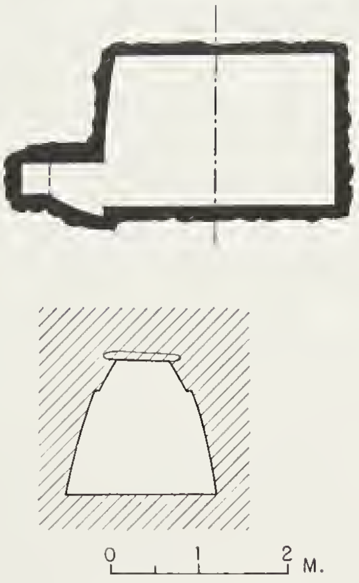


Figure 256. Sayil, Structure 4B1. Plan and section of subterranean vault.

GROUP OF STRUCTURES 4B2, 3

Southern of three major architectural assemblages at Sayil. Group consists of ball court (Str. 4B3) at east, which forms southern terminus of causeway that roughly bisects city, several contiguous courts, large multichambered building of palace type (Str. 4B2), and huge terrace approximately 100 m square at north (fig. 164). Main approach to group seems to have been from causeway through ball court and intervening courts to principal building, Structure 4B2. Great terrace, which carries only one small building, suggests large amount of construction was planned but never carried out.

Only three chultuns were observed in this large assemblage, but more are almost surely present. There are remains of a number of buildings with low foundation walls, characteristic of structures of the dwelling type.

Seven altars were found in this group. One, A22, is on the great terrace (fig. 164); three, A30–32, are in front of Str. 4B2 (see Monuments, below); one, A34, is in the ball court (see fig. 268); two, A33, 35, are associated with lesser buildings.

Structure 4B2

(South Palace, Little Palace)

PLAN AND SECTION

See figures 257, 258a.

SUBSTRUCTURE

Stairway. Broad stairway of three steps across front of building. Risers about .28 m high, made of faced stone. Treads about 1.25 m deep, built of rubble that presumably was plastered on upper surface.

Construction. None of retaining wall of platform or terrace that supports superstructure visible. Fill of terrace apparently of loose stone.

SUPERSTRUCTURE

(fig. 259)

Plan. See figure 257.

Section. See figure 258a.

Elevation. See figure 258b. Partially restored.

Base Molding. Exceptionally high, widely projecting three-member molding with colonnettes in middle member (figs. 258, 266). Similar molding, but with normal projection, across rear of Room 3 (fig. 260). Second story completely fallen or buried beneath debris and base molding restored (fig. 258) same as that of lower story but with normal projection.

Stairways. Broad stairway of three steps in front of building (figs. 257, 258a). Risers built of faced stone; deep treads (approx. 1.25 m) made of rubble that presumably was plastered on upper surface.

Step before entrance to Room 4 (fig. 260). May have been similar step before center doorway to Room 3.

Stairway from first to second story problematical. No trace at east, south, or west sides of building. Secondary wall construction on north (fig. 257) conceivably could be remains of stairway, but light walls faced on both sides, which is not typical of staircase construction, and no sign of steps visible.

Platform beneath second story approached from east by stairway of three steps (figs. 257, 258a).

Floors. Normal in color and construction. Floor in Room 4 raised .35 m above base molding across rear of Room 3 (fig. 260). Probably secondary with primary floor at usual level at top of base molding.

Walls. Highly variable in thickness. Width at doorjambs runs from .50 to .74 m, but walls actually thicker because of paneling around doorways (fig. 257; and see Doorways, below). Outer walls and transverse walls vary from .60 to 1 m thick and have usual swell from doorways to corners of rooms.

North wall of building increases in thickness from bottom to top (i.e., at medial molding) by .10–.15 m. This may be quite common, but often not observable.

Outer wall facing of well-dressed and fitted stone (fig. 262b). Inner facing normal but for Room 4 and Rooms 10–15, where many walls show rough masonry of undressed and only slightly shaped stone.

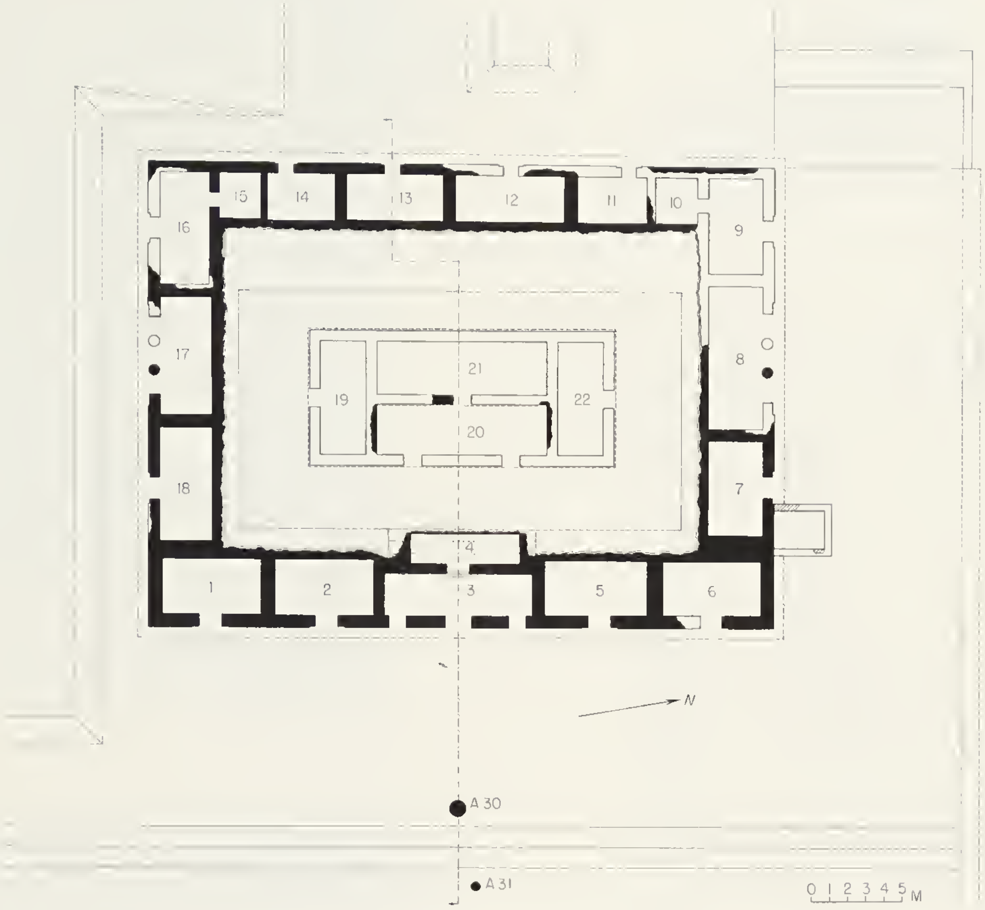


Figure 257. Sayil. Plan of Structure 4B2.

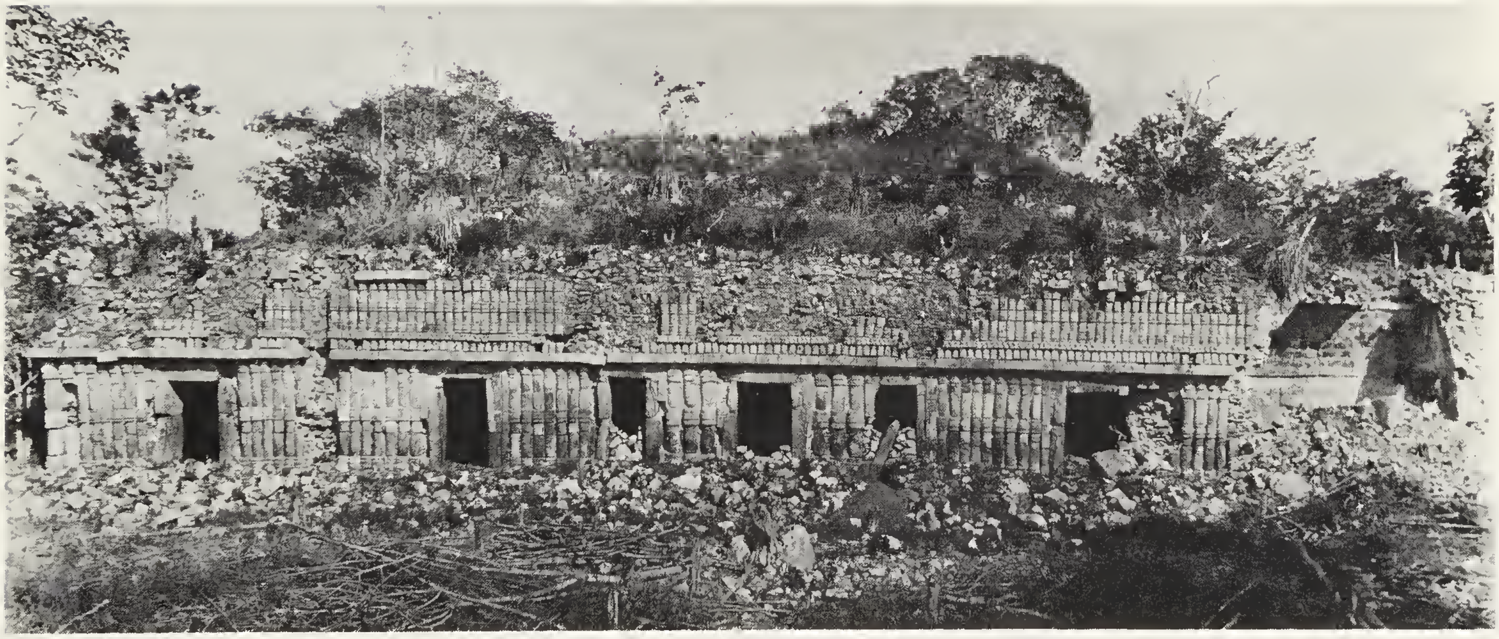


Figure 259. Sayil, Structure 4B2, looking west. Altar A30 seen in foreground.

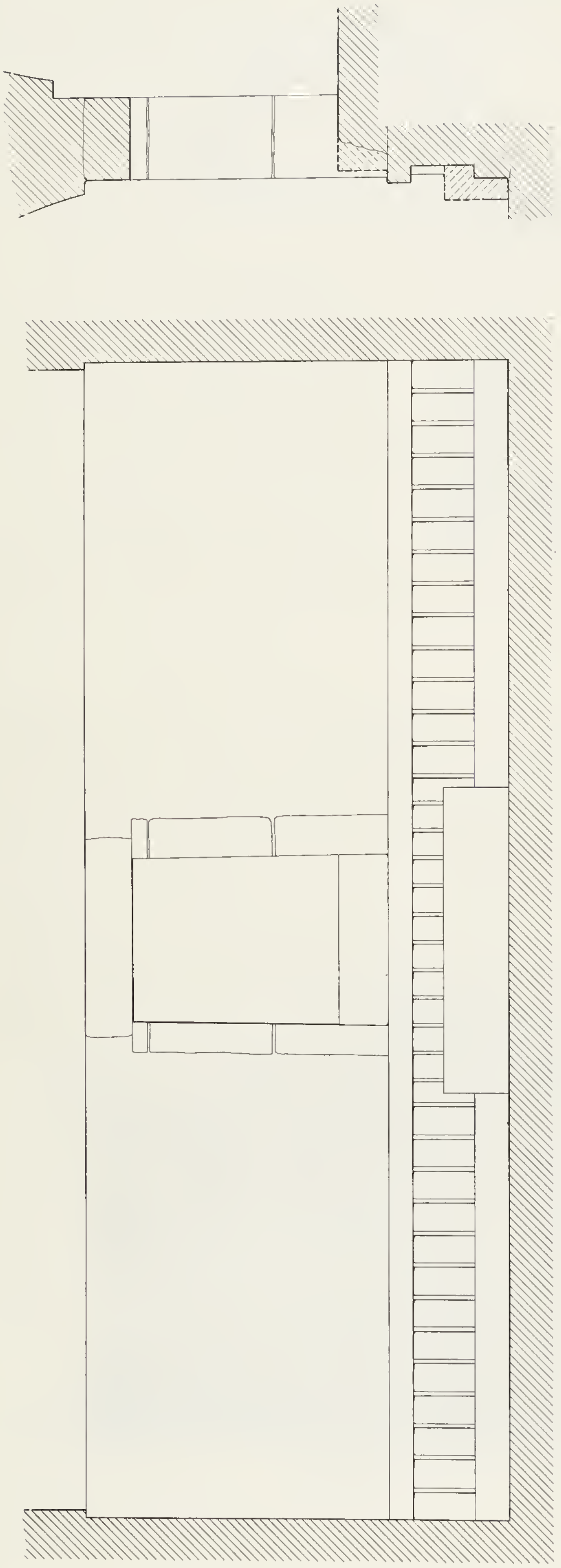


Figure 260. Sayil, Structure 4B2. Elevation of rear (west) wall of Room 3 and section through doorway to Room 4.

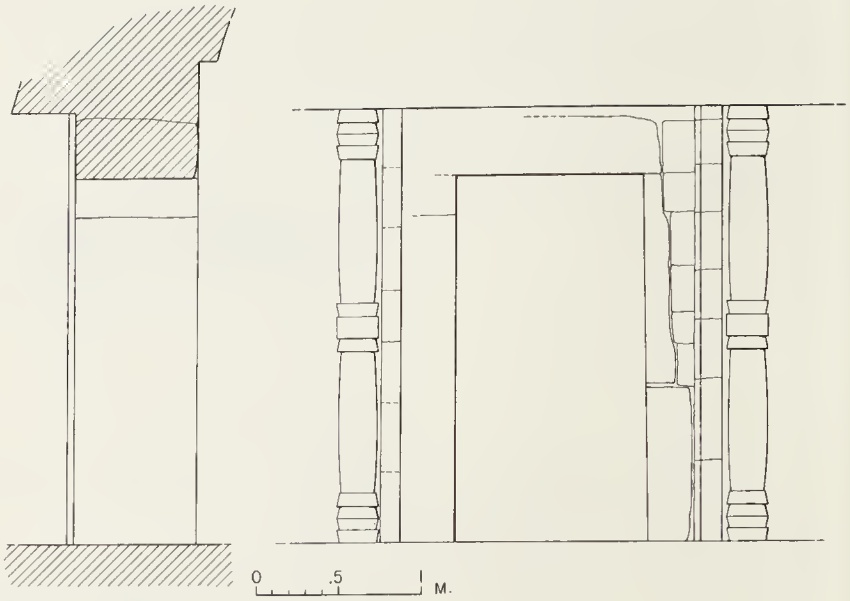


Figure 261. Sayil, Structure 4B2. Section and elevation of doorway to Room 2.

Doorways. Recessed panel in wall around all outer doorways except those to Room 3 (figs. 257, 258b). Panels at east (Rooms 1, 2, 5, 6) formed by specially cut wall stones giving panel depth of .04 m (figs. 261, 262a). Panels at north, south, and west formed by jambs and lintels being inset from plane of wall stones (figs. 262b, 263a); panels .08–.10 m deep.

All doorways employ stone lintels and full-width jamb stones (figs. 260–262, 263a) except jambs of north and south entrances to Room 3 (fig. 263b). Some tendency for doorways to narrow from bottom to top.

Two-column entrance to Room 17 and apparently to Room 8 (fig. 257). Column shafts in entrance to Room 17 each a single stone about .60 m in diameter and cut with usual entasis. Rectangular block .70 m wide by .67 m deep and shaped like three-member molding fallen before Room 17 (fig. 264a). Probably capital from west column in entrance to that room.

Wall Depressions and Projections. Usual hemispheroid rod sockets in doorjambs. Cordholders of one-tongue and two-tongue varieties, with tongue at corner and at side of stone, inside of doorways. Cordholders about 1 m above floor at ends of Room 3.

Dumb sheave formed by colonnette in niche (fig. 266) below level of spring of vault at each end of north, south, and east rooms (fig. 265) except in Room 3. Cupboardlike depression in west end of vault of Room 7 and of Room 18 (fig. 265b).

Projections imitating human foot on inner sides of vaults and square tenons on ends of vaults (figs. 265a, 266) in same rooms that have cumb sheaves, except Room 18 which has projection in form of scroll (figs. 264b, 265b) in place of foot. Shelf across north end of Room 1 (fig. 265a).

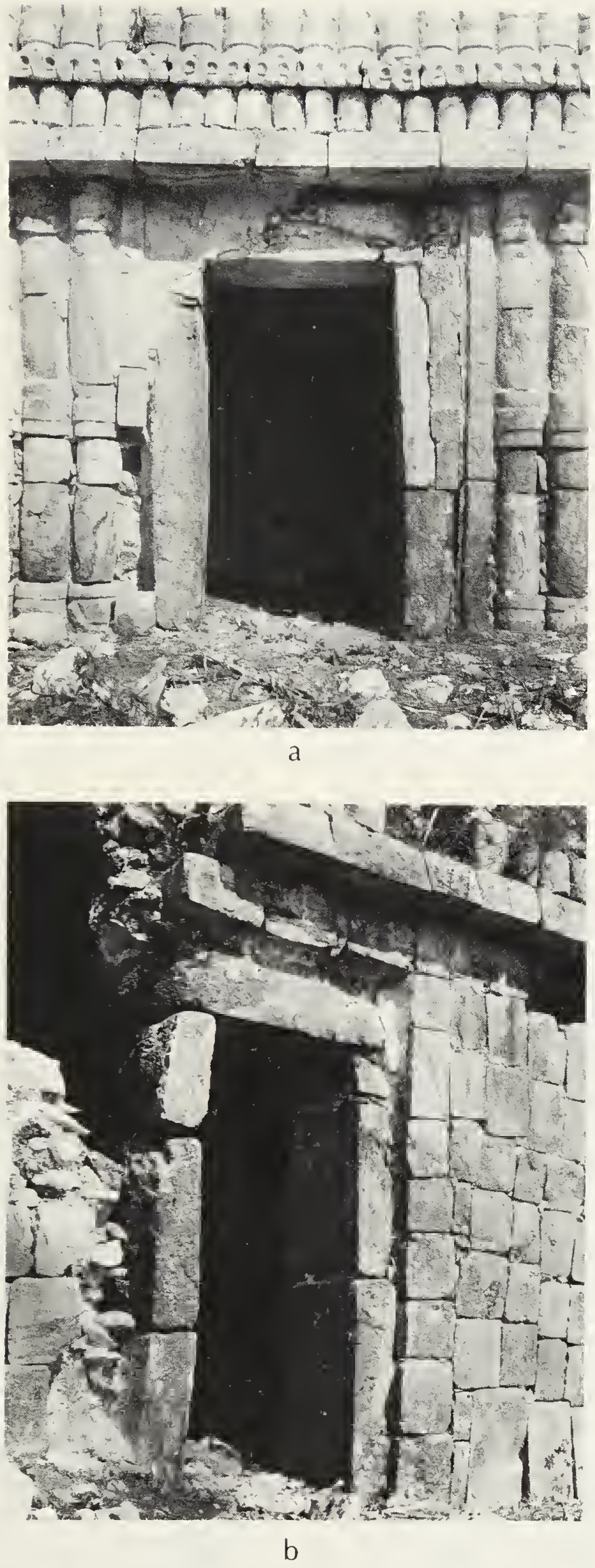


Figure 262. Sayil, Structure 4B2. Doorways: a, entrance to Room 2, looking west, and showing specially cut wall stones that form panel around doorway; b, entrance to Room 13, looking southeast, and showing recessed panel around doorway.

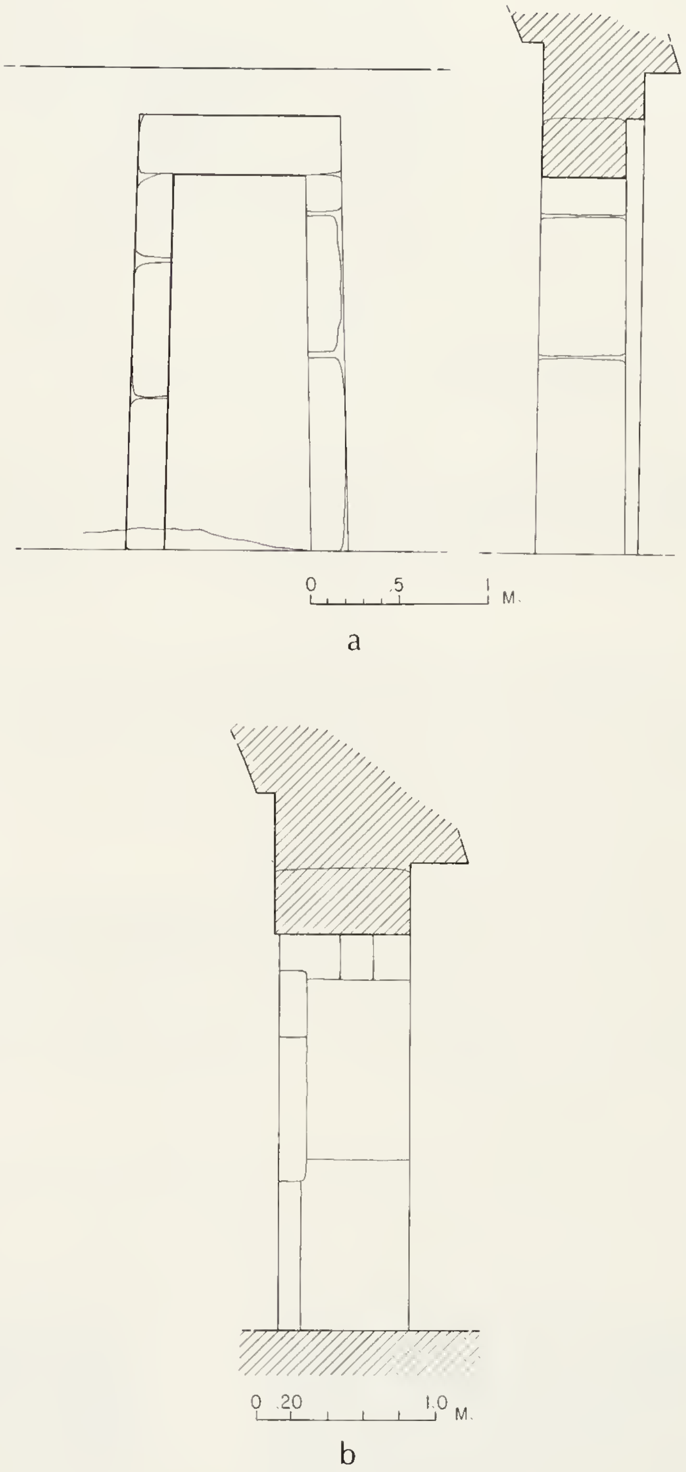


Figure 263. Sayil, Structure 4B2. Doorways: a, elevation and section of entrance to Room 13; b, section through north doorway to Room 3.

Vaults and Beams. North, south, and east vaults in all respects normal (fig. 266). Built of medium-sized, moderately well-dressed stone (fig. 265) with fair amount of stone of specialized shape. West vaults employ mixture of variety of stone described above and crude undressed stone. All capstones well cut.

Sockets for two large beams, one at each end of room, immediately below spring of vault in most rooms. Holes indicating three to six small beams in course below small offset under capstones in each room.

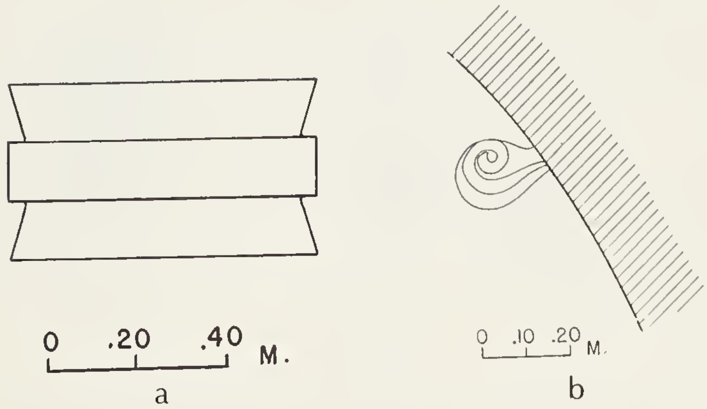


Figure 264. Sayil, Structure 4B2. Architectural details: a, capital (?) from column in entrance to Room 17; b, wall projection in soffit of vault of Room 18.

Moldings. Three-member medial molding with colonnettes in second member and guilloche motif on third member at north, south, and east (figs. 258b, 266), but plain third member at west.

Cornice molding same but for plain third member and presumably with usual coping course.

Decoration (see Hissink 1934, p. 50). Banded facade columns on lower wall of east facade (figs. 258b, 259, 261, 267a). Three extra large facade columns at each side of central doorway and at each corner, one column each side of corner column (fig. 267b). Lower wall zone plain at north, south, and west except for groups of three columns at corners.

Upper facade decoration of banded columns and masks (figs. 258b, 267a). Facade columns occurred at north, south, and east, and possibly, but not surely, at west. Only one mask element still in position (southeast corner). Many fallen elements indicate masks at corners of building, at center of east facade, and probably at center of west facade. Almost surely two or three superimposed masks at center-east facade, and may have been superimposed masks at corners. If more than two superimposed masks, would have stood above roof line (see Xlabpak, fig. 118). Masks in figure 258b restored from fallen elements.

Traces of red paint on panel around doorway to Room 13 and at places on upper facade zone. Blue paint around ankle of northern footlike wall projection in Room 1.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Little discernible. Floor of Room 4 apparently secondary, as well as walls projecting from north side of building that may have supported stairway to second story.

First story probably built as a unit despite crude masonry of Room 4 and of western rooms. Plan of first story indicates upper story was planned from outset.

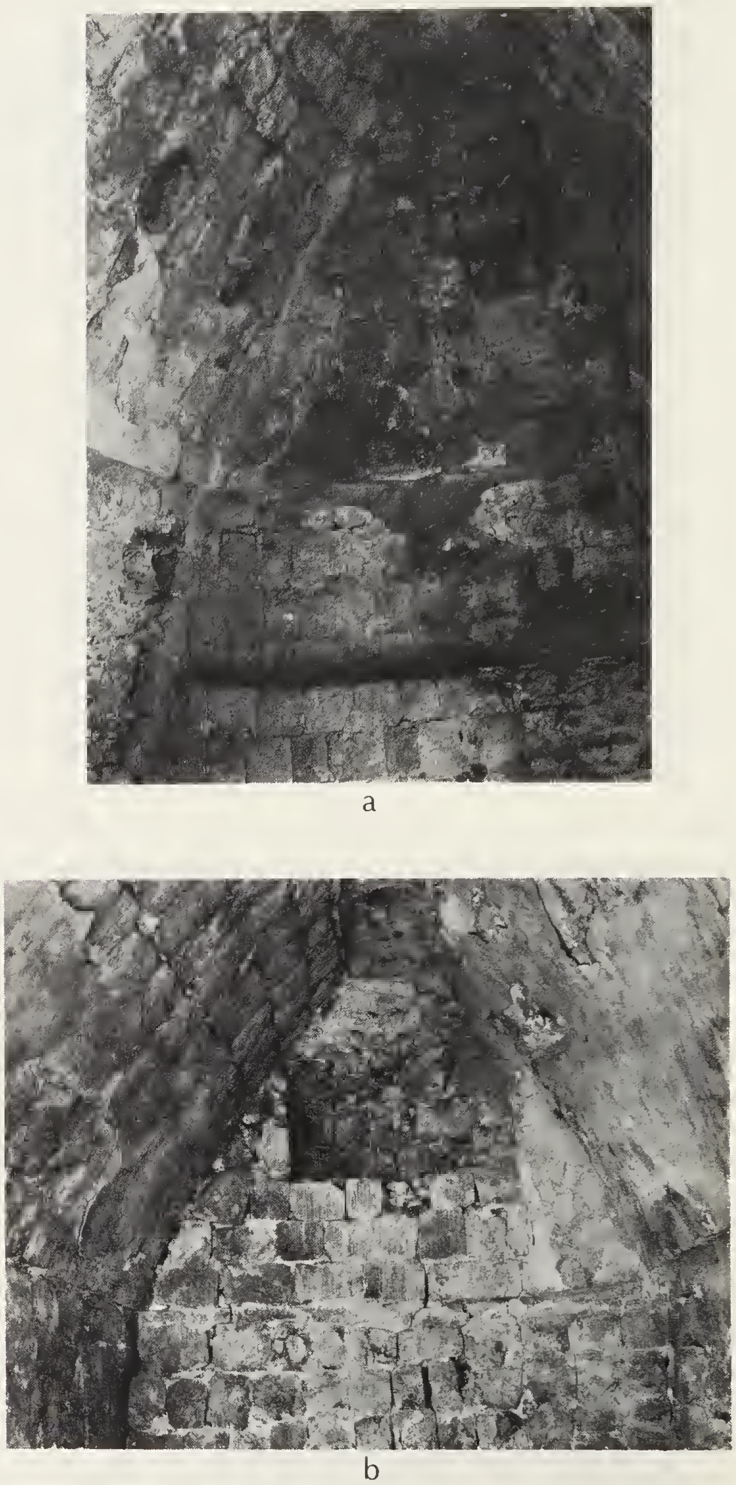


Figure 265. Sayil, Structure 4B2. Interior views: a, Room 1, looking north, and showing shelf across end of room, dumb sheave above shelf, and projection in form of human foot in soffit; b, Room 18, looking west, and showing dumb sheave in end of room, cupboardlike niche in end of vault, and projection in form of scroll in soffit (cf. fig. 264b).

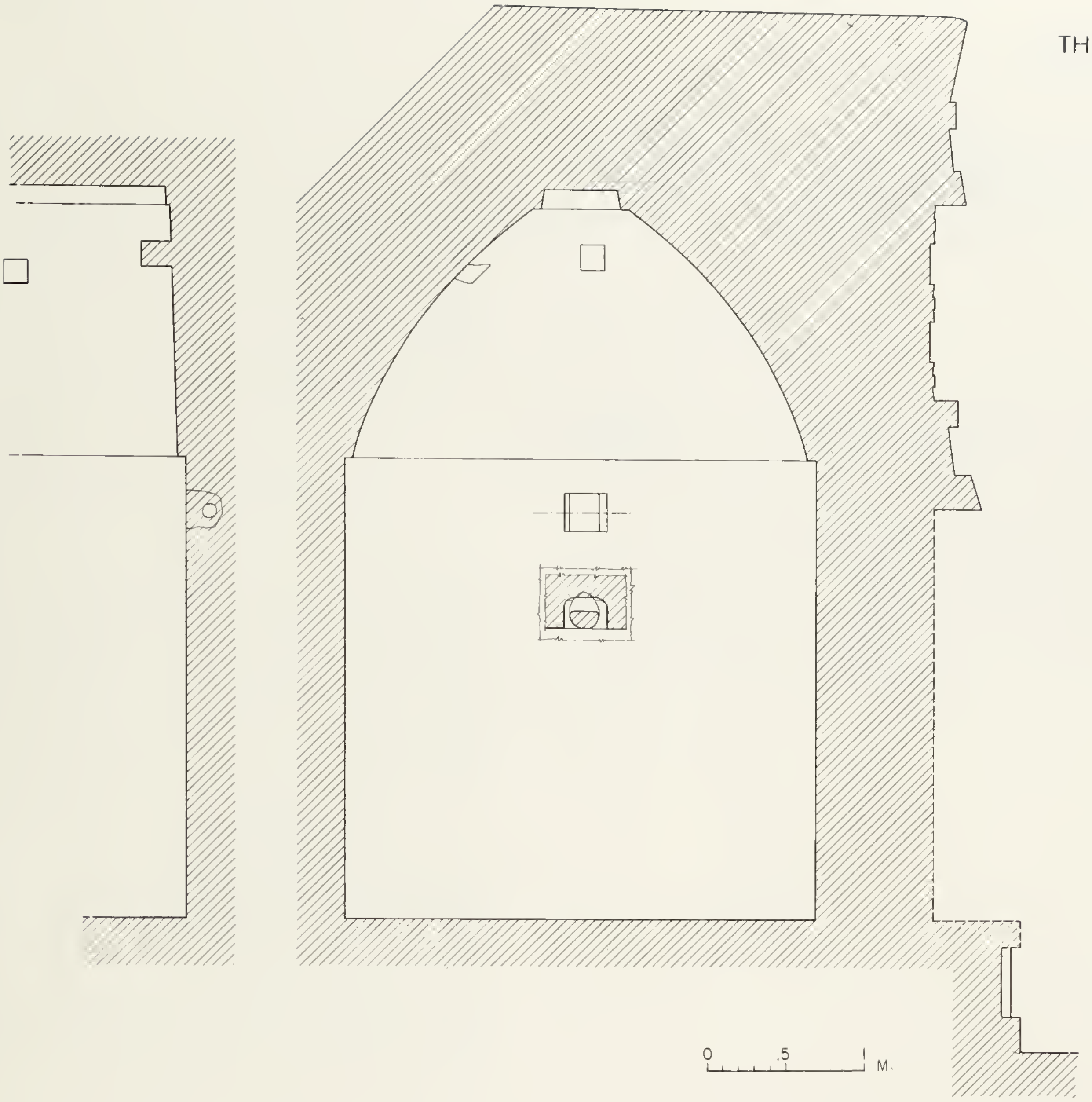


Figure 266. Sayil, Structure 4B2, Room 6. Section of north end of room, and east-west section with north end of room in elevation.

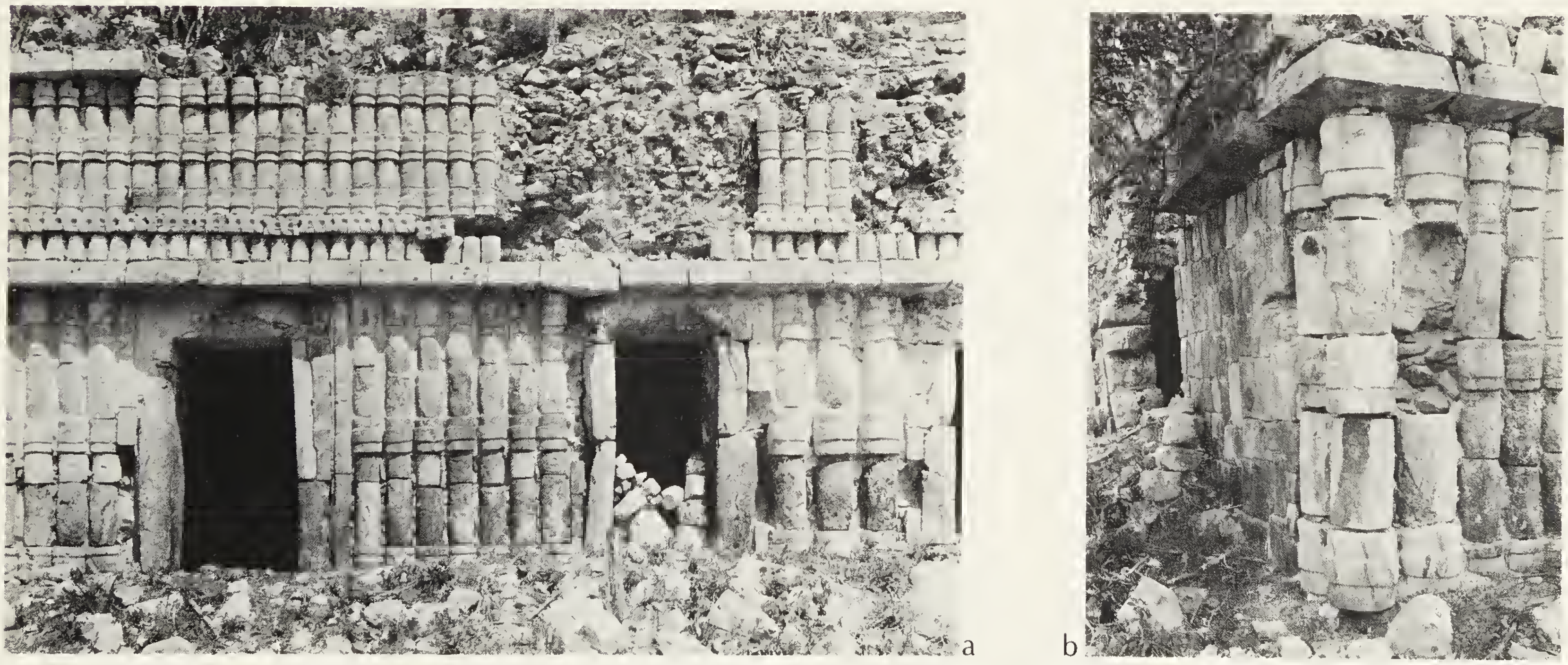


Figure 267. Sayil, Structure 4B2. Decoration: a, view of entrances to Rooms 2 and 3, looking west, and showing normal-size banded facade columns, extra large facade columns between entrances to Room 3, medial molding, and banded split columns in upper zone of facade; b, view of southeast corner of building, looking west, and showing large banded columns at corner.

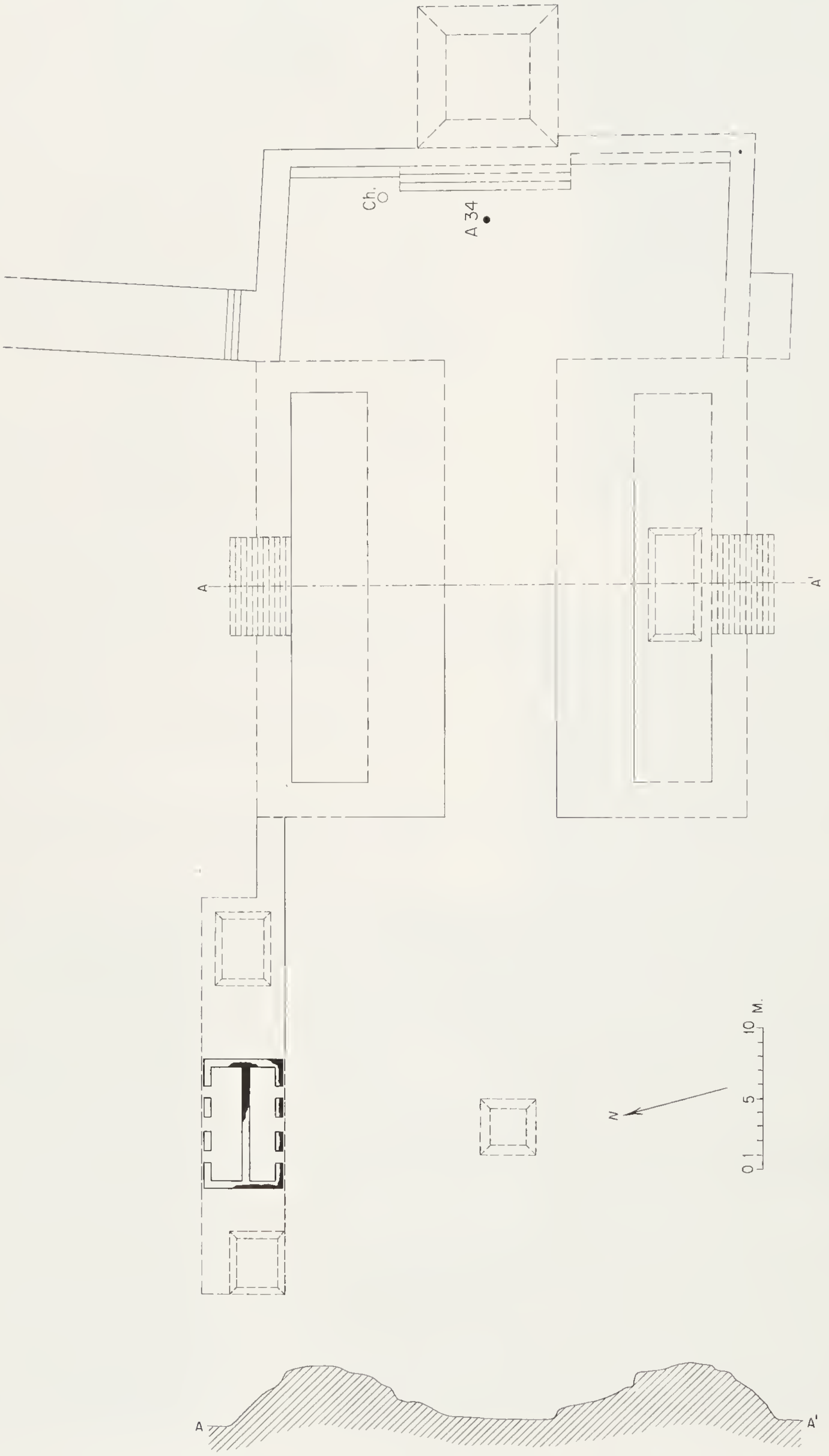


Figure 268. Sayil, Structure 4B3. Plan and north-south section.

Structure 4B3

(Ball Court)

Easternmost construction of Group of Structures 4B2, 3 (see above) and southern terminus of causeway (fig. 164). Ball court in ruinous condition, and only excavation, which was not carried out, can determine exact profile. Almost certain, nevertheless, that ball court is Type B of Acosta and Moedano (1946, pp. 381–382) classification.

PLAN AND SECTION

See figure 268; and see Blom 1932a (fig. 34).

CONSTRUCTION

Ball court consists of east-west oriented ranges and playing alley. End zone at east enclosed by low walls and fallen masonry building centered on longitudinal axis of ball court. At west is almost enclosed courtyard (fig. 164) with low platform near center and on axis of ball court. Suggestion of stairway against outer face of each range and remains of low masonry walls, presumably to support building of perishable materials, on top of south range.

Low walls of benches at sides of playing alley and higher walls above and behind benches seemingly vertical and once faced with dressed stone. Face of bench at north topped by course of dressed stone, deeply tailed, that now overhangs wall about .06 m (fig. 269a). May have slipped forward. No such stones observed on south bench where concrete floor slab that formed upper surface has coasted forward to overhang face of bench (fig. 269b, c). Evidence rather clearly indicates broad benches, or *gran talud* according to Acosta and Moedano (1946, pp. 381–382), that slope gently upward to vertical playing wall.

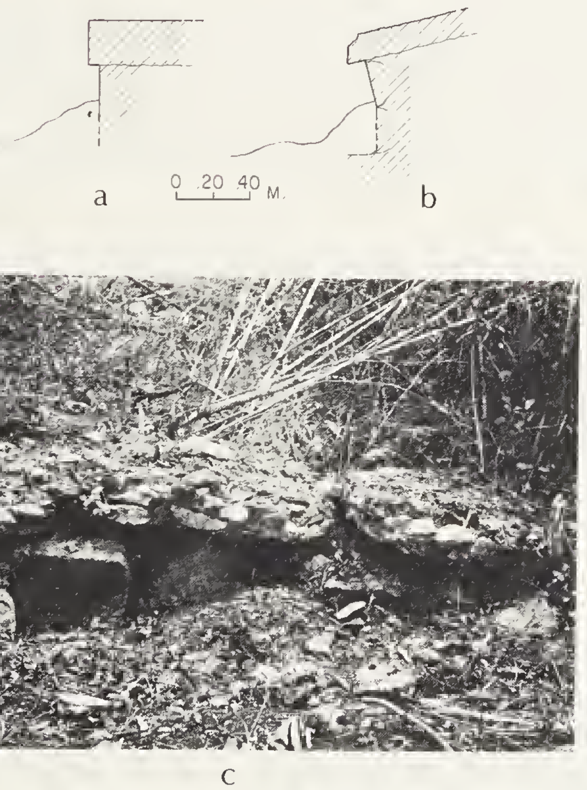


Figure 269. Sayil, Structure 4B3. Benches: a, section of face of north bench; b, section of face of south bench; c, view of face of south bench near center, looking south.

Structure 4B4

(Monument Platform)

Low platform situated on causeway short distance north of Ball Court (Str. 4B3, see above) in Group of Structure 4B2, 3 (fig. 164). Platform, which seems once to have supported eight stelae and seven or more altars, approached from north and south by causeway. Badly fallen walls leave precise orientation of platform in question. One stela butt (Stela 2) still *in situ* faces approximately 26° west of south.

What appears to be caved-in chultun just south of platform and west of causeway.

PLAN

See figure 270.

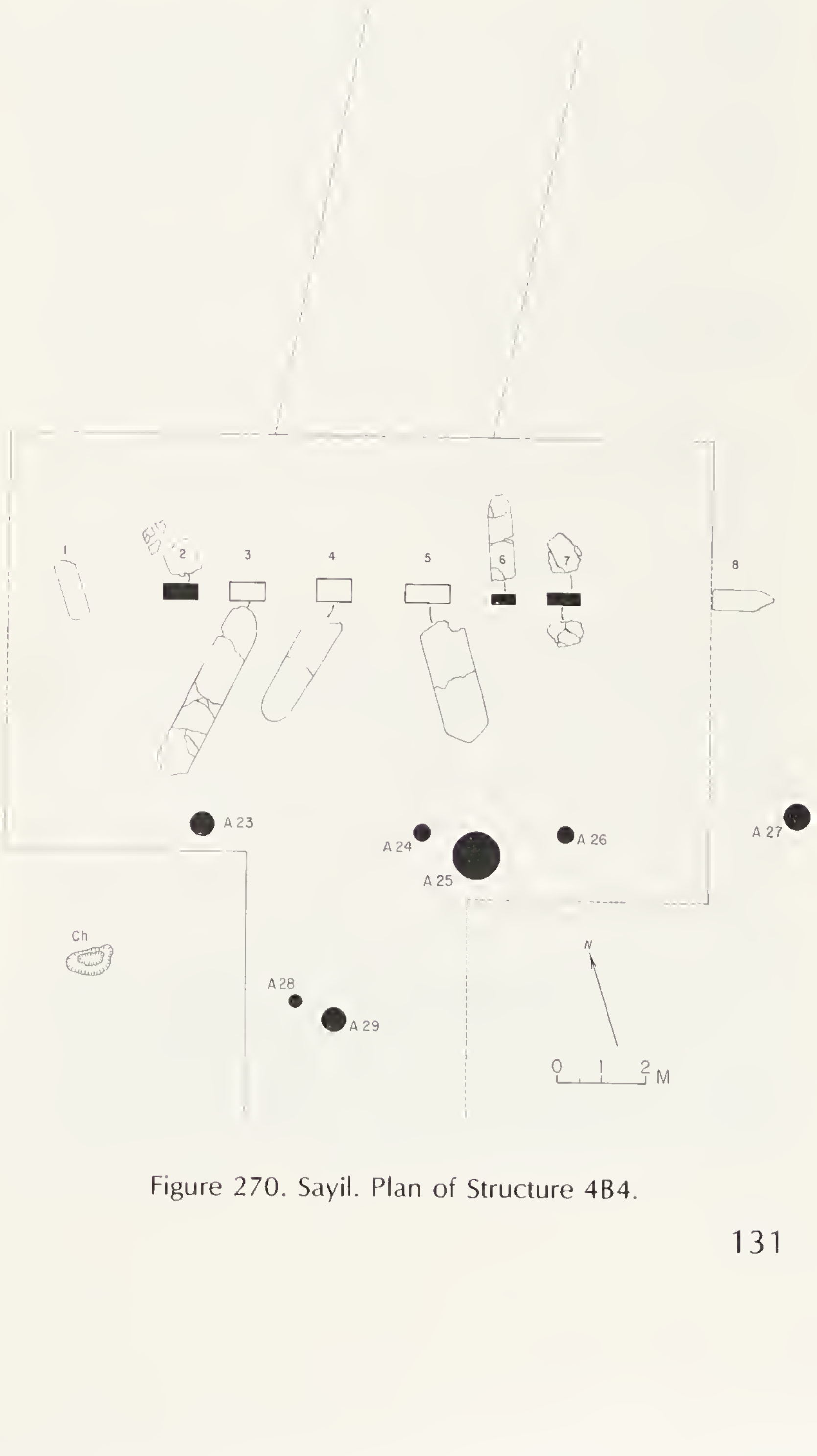


Figure 270. Sayil. Plan of Structure 4B4.

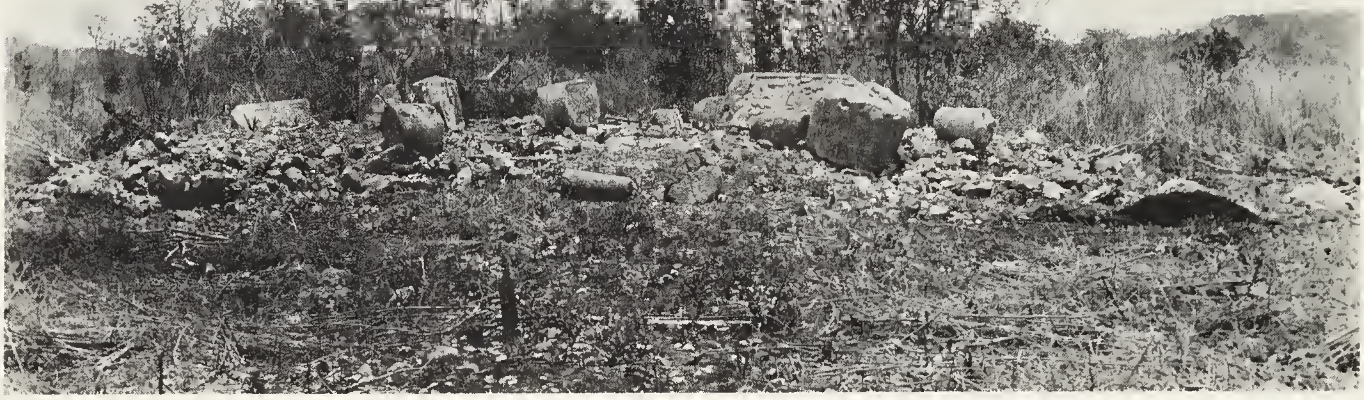


Figure 271. Sayil, Structure 4B4. View from south, showing monuments as found in 1935.

CONSTRUCTION

Platform approximately 1–1.50 m high, depending on natural contour of surrounding terrain (fig. 271). Wall, almost totally fallen, seems to have been vertical and built of large, roughly shaped stone. Broken stone surface indicates platform was paved with usual lime concrete and plaster flooring.

Approach from causeway at south seems to have been by ramp; at north may have been by steps, but not certain. Platform stands about 1 m above surface of causeway.

Almost definitely were eight stelae (Stela 1–8) on platform, Stela 8 having fallen off eastern side (fig. 270). Only butt of Stela 2 *in situ,* but those of Stelae 6 and 7 apparently nearly in place. Highly probable that stelae were in line and that all faced south.

Seven altars (Altars 23–29) present and question whether eighth may not be so broken as to be unidentifiable. Cannot be sure of original location of altars, but all lie toward south side of platform and hence in front of stelae.

See Monuments (below) for description of stelae and altars.

Structure 4C1

Four-room building of which only south room is standing and offers any worthwhile architectural detail. My plan, which I believe to be correct, differs from map (fig. 164) in showing south room with different orientation than remainder of building. South room once stood alone as separate structure and is so treated here.

SUPERSTRUCTURE

SOUTH ROOM

Plan. See figure 272.

Section. See figure 272.

Elevation. See figure 272.

Base Molding. Simple course of dressed stone .27–.29 m high.

Walls. Lighter than normal but not out of proportion in this small building. Run .42–.47 m thick. Outer facing stone small, averaging about .20 × .30 m, and of mediocre quality (fig. 273a, b); inner facing stone averages about .20 × .25 m and is roughly cut. Outer corners of building employ relatively long cornerstones (fig. 273a, b).

Doorway. Jamb stones unusual in being narrower at top of jambs than at bottom (fig. 272). Stone lintel (fig. 273a). Doorway .82 m wide at bottom, .72 m at top.

Wall Openings. Small rectangular openings, about .10 × .20 m, immediately below overhang of upper wall zone. One in front wall south of doorway and one in middle of south end wall (fig. 272). Probably once was similar opening in front wall north of doorway and in north end wall.

Wall Depressions. One cordholder of one-tongue-at-side-of-stone variety in inner wall at lower right side of doorway.

Vault and Beams. Vault rather broad in proportion to height and with wide capstones (fig. 272). Vault stone fairly well dressed, rather small, relatively deeply tailed, not highly specialized (fig. 273c).

One beam at each end of room below spring of vault. Three beams in small offset course below capstones.

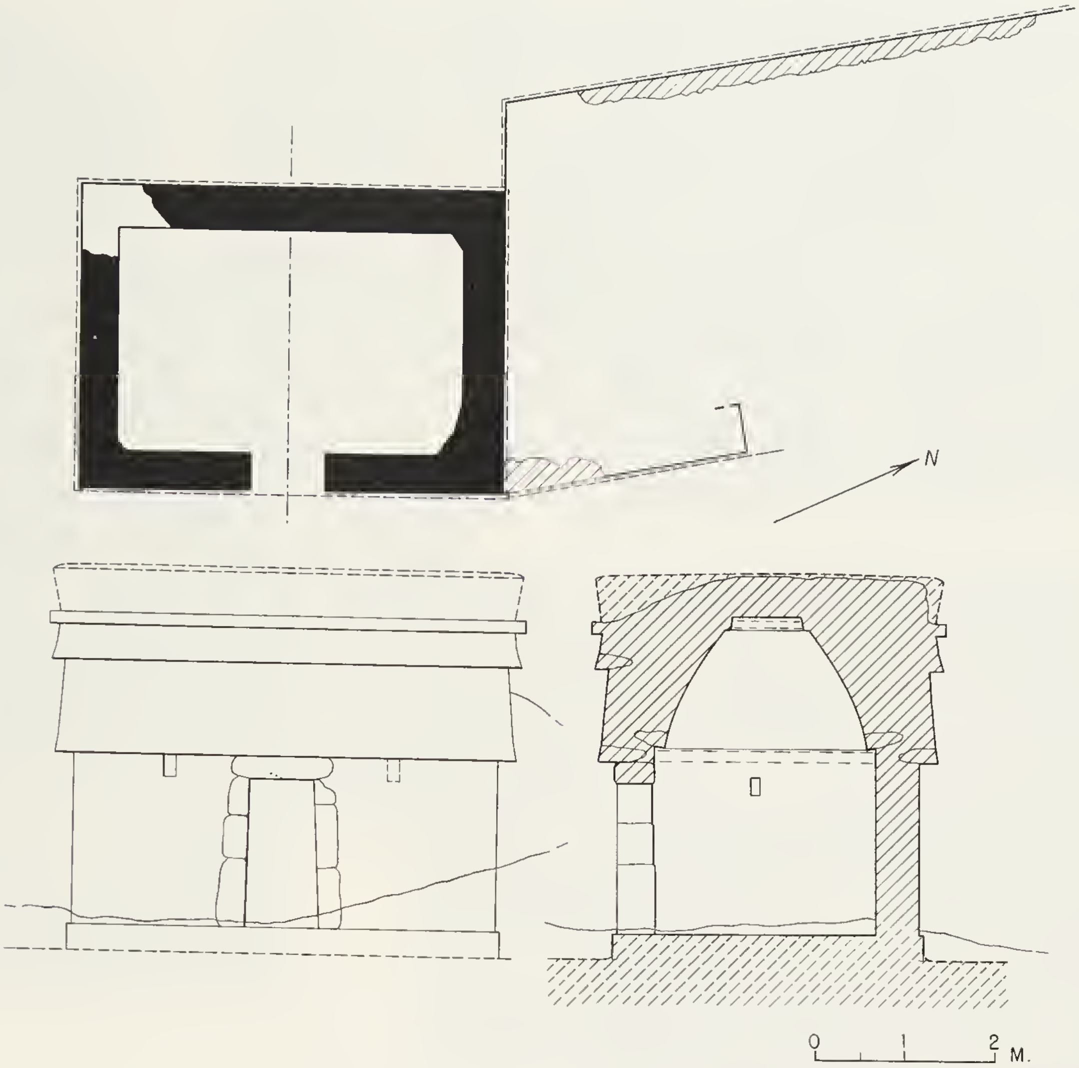


Figure 272. Sayil, Structure 4C1. Plan, restored eastern elevation, and east-west section of south room.

Molding. No medial molding proper, but overhanging, battered upper facade that rises to cornice molding (figs. 272, 273a, b). Three-member cornice molding lowest member of two courses of stone, and top member, which is missing, probably built of two courses.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Room abutting south room of Structure 4C1 (fig. 272) obviously secondary, as shown by complete exterior north facade of south room that was later buried by construction of rooms to north. Only lower, outer wall facing of secondary construction now visible. Stone larger and much better faced and fitted (fig. 273a, b). Thickness of wall at jamb .55 m.

MISCELLANEOUS SCULPTURE

M1. Stone ring (fig. 274) broken and incomplete. Original outside diameter approximately .66 m, inside diameter approximately .34 m, thickness .14 m. Found on surface just east of Structure 2B3. All surfaces of ring well dressed. Ring is nowhere near any structure that resembles ball court and probably is not a ball-court ring.

M2. Human face of stucco (see Pijoan 1946, figs. 730, 731). Dimensions not recorded. Provenience unknown. Kept in guardian's house at Sayil in 1935.

MONUMENTS

STELAE

Stelae 1–8. Eight stelae fallen on, or adjacent to, Structure 4B4 (fig. 270). Discovered by Maler (1895, p. 277) in 1887 and rediscovered by Blom (1934, p. 59) in 1930. Some of stelae moved by Maler, but indications are that all stood in an east-west row and faced in a generally southerly direction. Stela 8, now off eastern edge of Structure 4B4, presumably once stood on that platform.

Stela 1. Carved (fig. 275a). Maximum height 1.38 m, maximum width .47 m, maximum thickness .30 m. Carving badly eroded. Can discern feet, legs, and loincloth (maxtli) of standing human figure. Probably vertical column of hieroglyphs at left and horizontal band below feet of figure (cf. Stelae 3 and 4, below). See Proskouriakoff 1950 (p. 162).

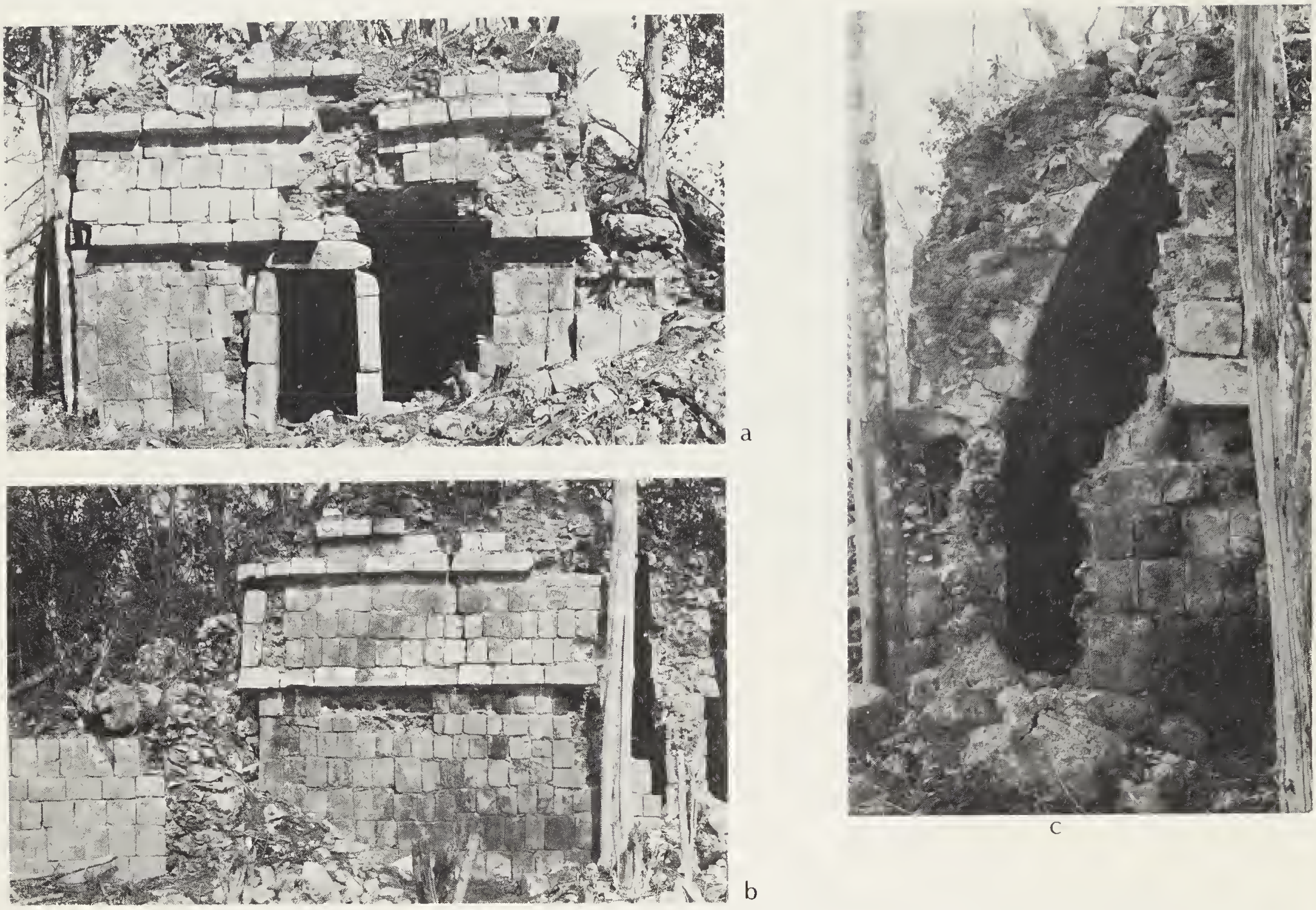


Figure 273. Sayil, Structure 4C1. Views of south room: a, main facade, looking west; note two large walls stones of later north addition; b, rear of building, looking east, and showing northwest corner against which later north rooms were built; c, vault masonry seen in section, looking north.

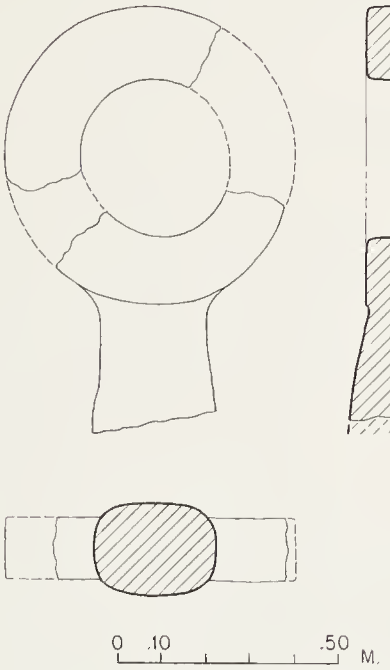


Figure 274. Sayil. Miscellaneous sculpture, M1, broken stone ring.

Stela 2. Carved (ibid., fig. 90b, mislabeled Stela 7). Maximum height upper part 1.45 m, lower part .54 m to bottom of carving; maximum width .80 m; maximum thickness .38 m. Base of stela still in approximate position facing 26° west of south. Carving badly eroded. Glyphic band across bottom, across upper part, and apparently vertical column of glyphs at each side. Cannot make out rest of carving (ibid., p. 162).

Stela 3. Carved (fig. 276a, and ibid., fig. 89a). Maximum height approximately 4.20 m, maximum width .82 m, maximum thickness .42 m. Carving relatively well preserved but for face of principal figure and glyphic band beneath feet of figure. Proskouriakoff (ibid., p. 162) suggests date early in Cycle 10.

Stela 4. Carved (fig. 276b; and see Maler 1895, fig. 9; Proskouriakoff 1950, fig. 81a). Maximum height 2.73 m, maximum width .80 m, maximum thickness .52 m. Carving somewhat eroded and face of principal figure

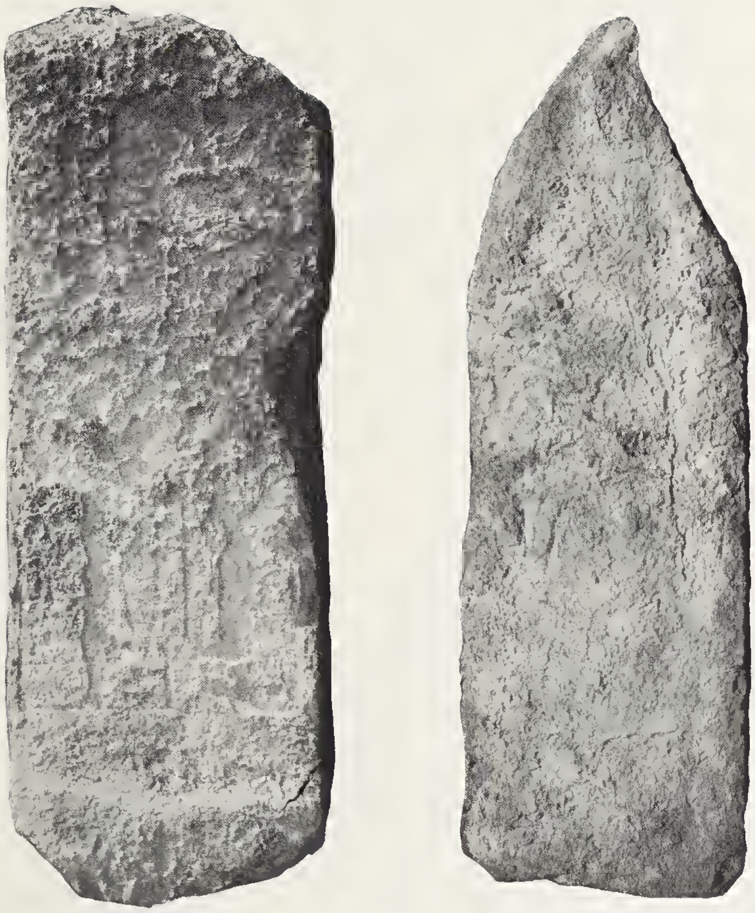

a b

Figure 275. Sayil. Stelae 1 and 8: a, Stela 1; b, Stela 8.

gone. Numerous traces of red paint on carved surface (ibid., p. 163).

Stela 5. Carved (fig. 276c; and see Maler 1895, fig. 8; Proskouriakoff 1950, fig. 89b). Maximum height 2.83 m, maximum width 1.04 m, maximum thickness .42 m. Carving in fair state of preservation but for face of principal figure. Low relief decoration of feathers in background at left of legs of figure and inside of right border. Proskouriakoff (ibid., p. 162) suggests date early in Cycle 10.

Stela 6. Carved (fig. 276d; and ibid., fig. 80c). Maximum height 2.65 m, maximum width .55 m, maximum thickness .24 m. Carving badly eroded. Rather small principal figure stands on pedestal or throne. Horizontal band of glyphs above headdress of figure. Proskouriakoff (ibid., p. 162) tentatively suggests date of 9.19.0.0.0 (A.D. 810).

Stela 7. Carved (ibid., fig. 90a, mislabeled Stela 2). Present maximum width .77 m, maximum thickness .28 m. Broken into many fragments and good part of stela missing. Too weathered and fragmentary to make out subject of carving other than feet and legs of figure above horizontal band of glyphs.

Stela 8. Question whether carved or not (fig. 275b). Maximum height 1.42 m, maximum width .48 m, maximum thickness .35 m. Surface badly eroded. Faint indication of raised borders but no other signs of carving now visible.

Stela 9. Carved (fig. 277, and see E. W. Andrews 1939, pl. 2c, d; Proskouriakoff 1950, fig. 90d). Maximum height 1.42 m, maximum width .48 m, maximum thickness .35 m.

Located approximately 65 m southeast of Group of Structure 3B2 (fig. 164). Originally stood behind three altars (fig. 279). Now fallen, face up, feet to south, axis 27° east of north.

Stela terribly weathered, burned, and cracked all through. Stone originally well cut and dressed on sides and corners. Top of stela largely gone. Figure probably had headdress. Relief of carving .10 m at face, .06 m at arms, .08 m at legs. (See E. W. Andrews 1939, pp. 76–79; 1943, pp. 82–87; Proskouriakoff 1950, p. 163.)

ALTARS

Thirty-eight altars were observed and located on the map of the site (fig. 164). It may be worth noting that the great majority are associated with the three major architectural complexes (Strs. 2B1, 3B2, 4B2) or lie on or near the causeway that roughly bisects the city. Almost surely, many more altars lie hidden beneath debris, are too shattered or otherwise damaged to be identified, or simply were missed in our survey.

None of the altars was carved. Twelve, a representative group, were measured and drawn (see below), and cursory observations were made on four others. Although the altars may be divided into *drum* and *column* varieties, based on proportion of diameter to height, the two shapes run from one to the other with no very obvious break, and there is the question of what significance, if any, the distinction has. I am arbitrarily assigning any altar whose maximum diameter equals or exceeds its height to the *drum* variety, and classifying as *column* those altars in which height exceeds maximum diameter. At Sayil, the column variety was much more popular than the drum.

Altar 1. Plain (fig. 278a). Diameter at top .57 m. On low platform on terrace before Structure 2B1 (fig. 173). Column altar, well cut and dressed on all surfaces.

Altar 2. Plain (fig. 278b). Height 1.25 m. In front of main stairway to Structure 2B1 (fig. 173). May originally have rested on low rectangular platform just west of present location of altar. Typical column altar, well cut and dressed on all surfaces.

Altar 6. Plain (fig. 278c). Diameter at top .45 m. In court in front of Structure 2C4 (fig. 164). Typical column altar, well cut and dressed on all surfaces.

Altar 9. Plain (fig. 278d). Diameter at top .50 m. At center of court in front of Structure 3B2 (fig. 164). Column altar with fragment broken from top.

Altars 13–15. Three altars arranged symmetrically in front of Stela 9, located approximately 65 m southeast of Group of Structure 3B2 (figs. 164, 279).

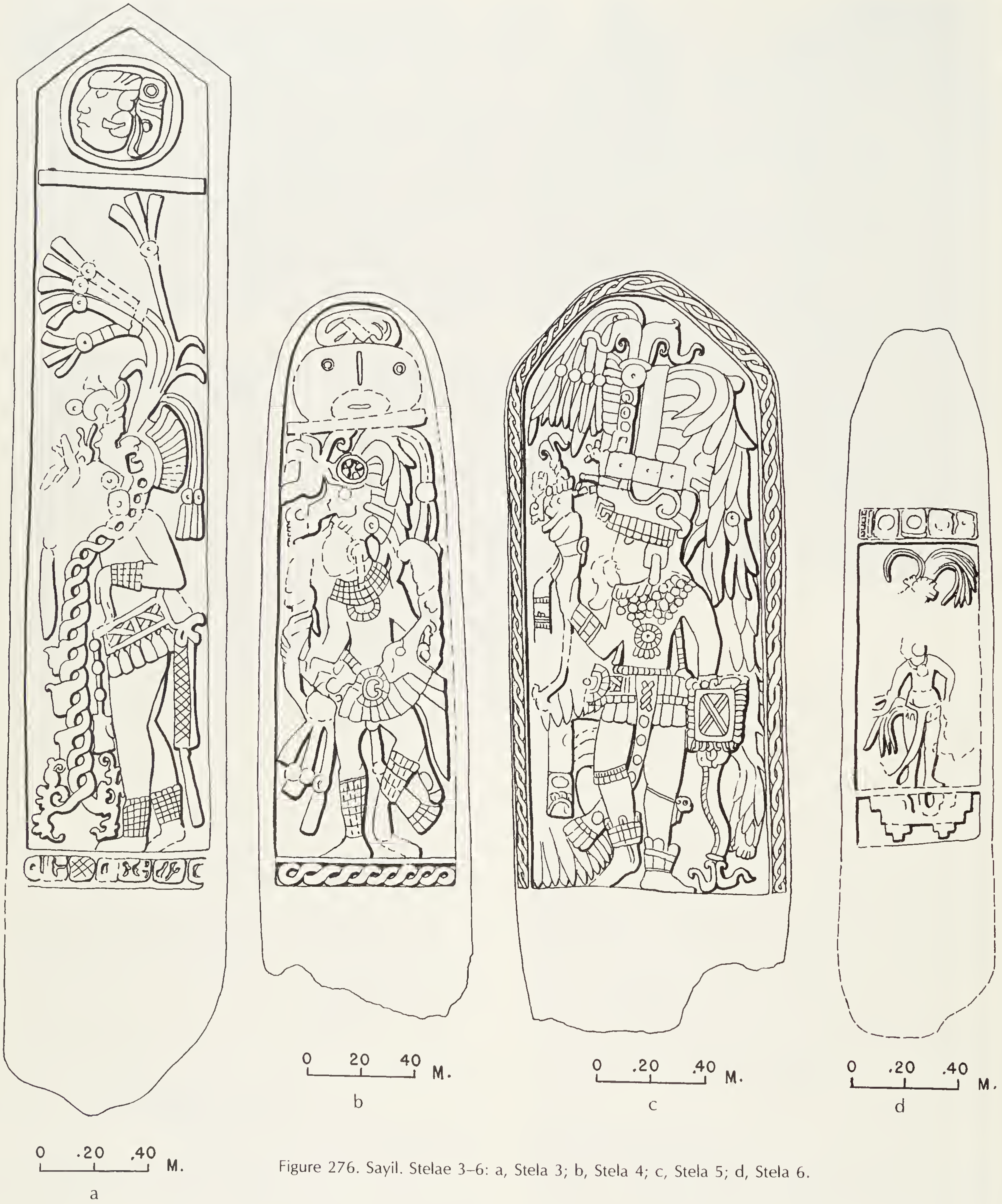

0 20 40 M.
0 .20 .40 M.
0 .20 .40 M.
0 .20 .40 M.
a
b
c
d

Figure 276. Sayil. Stelae 3–6: a, Stela 3; b, Stela 4; c, Stela 5; d, Stela 6.

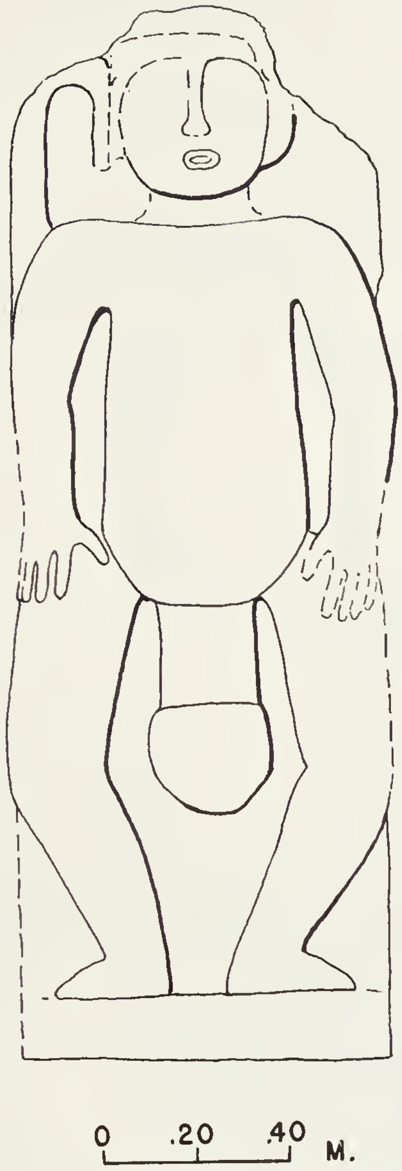


Figure 277. Sayil. Stela 9.

Altar 13. Near duplicate of Altar 15 (see below).

Altar 14. Plain (fig. 278e). Diameter at top .50 m. Badly weathered column altar that probably was well faced on all surfaces.

Altar 15. Plain (fig. 278f). Diameter at top .40 m. Column altar, well faced on all surfaces.

Altars 23–29. Group of seven altars lying on or adjacent to Structure 4B4 and in front of Stelae 1–8 (fig. 270). Monuments discovered by Maler (1895, p. 277) in 1887 and number of them moved by him at that time. May originally have been one altar before each stela, one altar now being missing.

Altar 23. Plain (fig. 278g). Diameter at top .66 m. Column altar with sides that curve in at bottom.

Altar 24. Plain (fig. 278h). Diameter at top .54 m. Typical column altar.

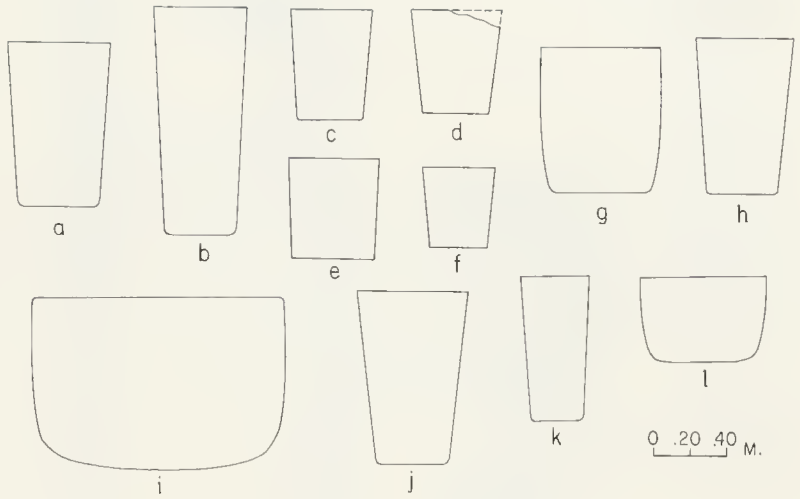


Figure 278. Sayil. Profiles of Altars 1, 2, 6, 9, 14, 15, 23–26, 28, 29: a, Altar 1; b, Altar 2; c, Altar 6; d, Altar 9; e, Altar 14; f, Altar 15; g, Altar 23; h, Altar 24; i, Altar 25; j, Altar 26; k, Altar 28; l, Altar 29;

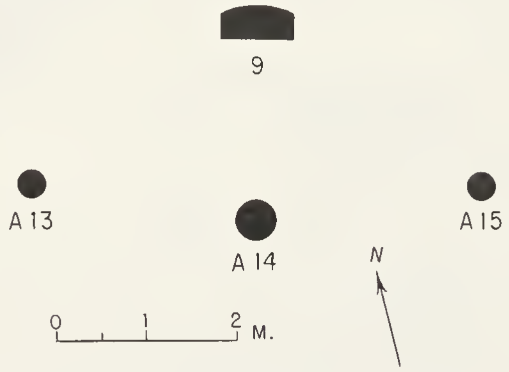


Figure 279. Sayil. Plan of Stela 9 and Altars 13–15.

Altar 25. Plain (fig. 278i). Diameter at top 1.40 m. Large drum altar with sides that curve in to convex bottom.

Altar 26. Plain (fig. 278j). Diameter at top .62 m. Typical column altar similar to Altar 24.

Altar 27. Plain (?). Badly broken and half buried. Apparently about size and shape of Altar 23.

Altar 28. Plain (fig. 278k). Height .80 m. Small column altar.

Altar 29. Plain (fig. 278l). Diameter at top .70 m. Badly broken drum altar. Sides bowed and curved in at bottom.

Altar 30. Plain. Diameter at top about 1.05 m, height about .80 m. Centered at top of stairway before Structure 4B2 (fig. 257). Drum altar, broken and held in roots of tree. Some narrowing at base but rather straight sided.

Altar 31. Plain. Diameter at top about .55 m, height about .35 m. At foot of stairway before Structure 4B2 and in line with Altar 30 (fig. 257). Drum altar of approximately same shape as Altar 30.

OTHER SITES

Sanacte
(Sanacté, Sanoote)

Approximately 5 km northeast of Sayil. Two buildings still standing in 1842: (1) structure of five rooms in line with banded facade columns between doorways, (2) building with roof structure, possibly of temple type.

REFERENCE

Stephens 1843, 2:36–38.

Chac
(Chack)

Approximately 4 km north-northwest of Sayil. Two buildings standing in 1842, the better preserved being a structure of two stories on top of a hill. Hissink quotes a manuscript of Maler's that describes what is probably the same building.

REFERENCES

Stephens 1843, 2:30–31.
Hissink 1934, pp. 50–51.

Xcavil de Yaxche
(Xcabil de Yaxche)

Approximately 4 km southwest of Sayil.

Good-sized site with a number of structures, at least five of which were standing in Maler's time (1887). Two buildings described in some detail and illustrated (fig. 280, and see Maler 1902, fig. 7).

REFERENCES

Maler 1902, pp. 205–206.
Hissink 1934, p. 60.

Dsecilna
(Dzekilna, Zekilna, Descilna, Dzcecilna)

Approximately 15 km west of Sayil.

Large site apparently covering area of at least 1 square kilometer. Remains of numerous structures but little standing. Notable for sculptured doorway columns (see Maler 1895, figs. 18, 19; Proskouriakoff 1950, p. 168; 1951 p. 115).

REFERENCE

Maler 1895, pp. 282–284.

San Simon, near Xculoc

Approximately 18 km west of Sayil and 4 km north of Xculoc.

Known only by sculpture (see Pijoan 1946, fig. 787; and Proskouriakoff 1951, fig. 6b) in archaeological museum in Merida, Yucatan, which is labeled as coming from Hacienda San Simon. Three very similar pieces of stone sculpture in museum. Maximum height of piece illustrated 1.05 m, maximum width .65 m. Hacienda San Simon referred to as provenience of sculpture is presumably that near Dsecilna (see above), and sculpture could well come from that site. There is, however, another San Simon west of Maxcanu, not far from the seacoast.

REFERENCE

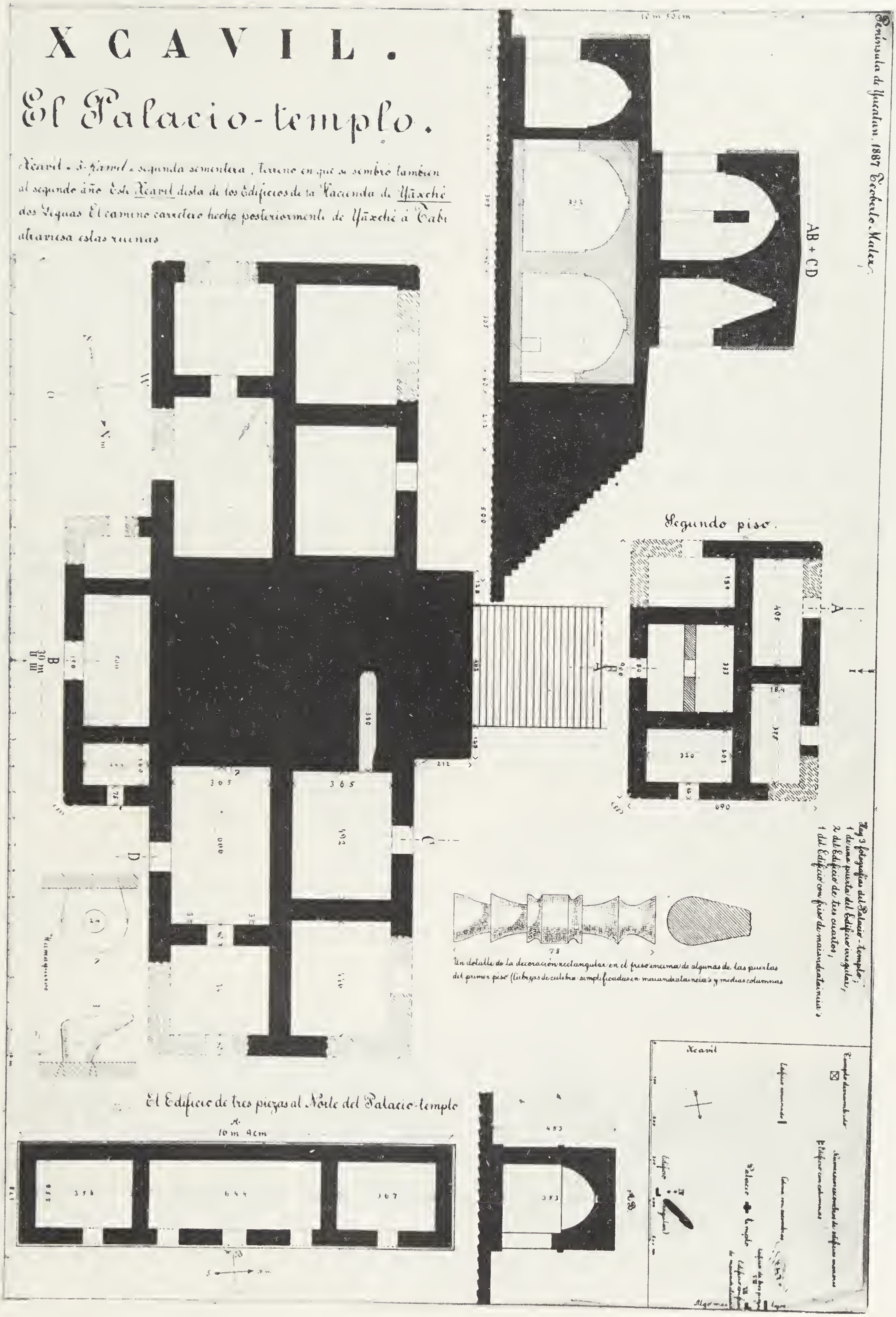
Proskouriakoff 1951, p. 118.

Figure 280. Xcavil de Yaxche. Maler plans and drawings. Title: Xcavil, The Palace temple. Xcavil = second sowing, land which is sown again the second year. This *Xcavil* is two leagues from the buildings of *Yaxche* Hacienda. The cart road, made later from Yaxche to Tabi, goes through these ruins. Plan (bottom left): The building of three rooms north of the Palace temple. Details: (left) Hammock hooks; (right) A detail of the rectangular [geometric?] decoration in the frieze above some of the doorways of the first story (simplified serpent heads of meanders [frets?] and half columns). Legend at right of detail: There are 3 photographs of the Palace temple; 1 of a doorway in the irregular Building; 2 of the building of three rooms; 1 of the building with the frieze of meanders [frets?]. Map of Xcavil at lower right (top of map to right): Fallen temple. Numerous remains of small buildings. Building with columns. Ruined building. Hillock with remains. Building of three rooms. Palace temple. Building with meander frieze. Irregular building. Scale: plans and sections 1:200; details 1:20; map approx. 1:13,000.

XCAVIL.

El Palacio-templo.

Xcavil = 2. Xamil = segunda sementera, terreno en que se sembró también al segundo año. Este Xcavil dista de los Edificios de la Hacienda de Yaxché dos leguas. El camino carretero hecho posteriormente de Yaxché á Tabi atraviesa estas ruinas



Hay 3 fotografías del Palacio-templo;
1 de una puerta del Edificio irregular;
2 del Edificio de tres cuartos;
1 del Edificio con friso de [illegible]

Un detalle de la decoración rectangular en el friso encima de algunas de las puertas del primer piso (cabezas de culebra simplificadas en [illegible] y medias columnas

El Edificio de tres piezas al Norte del Palacio-templo

Kabah

ETYMOLOGY

Carillo (1846) says, *kab* = hand; *ah* = he, and suggests the anagram *ahkab* = he of the strong or powerful hand. He connects the name with the sculpture (M1) of a man holding a snake (see fig. 200). In a postscript (ibid.) he changes this to *kab* = hand; *bah* = to nail, fasten, or drive in; *Kabah*—hand that nails, fastens, or drives in. Maler (n.d., p. 20) calls the ruins *Kabahaucán,* which he translates as "the royal snake in the hand," and also associates the name with the sculpture M1 (p. 200). Hissink (1934, p. 44), obviously following Maler, gives "rattlesnake in the hand." Roys (1935, p. 4) states that Kabah means nothing to him. The name is found in the *Book of Chilam Balam of Chumayel* (Roys 1933, p.82) and thus is a truly old place-name. Variant spelling: Kaba, Kahbah, Xaba. Other name: Kabahaucan, Kabahancan, Habahaucan.

SITUATION

Latitude 20°14.6′ N, longitude 89°39.9′ W. Approximately 7 km north of Sayil, 5 km west of hacienda of Santa Ana, and 18 km southeast of Uxmal.

TOPOGRAPHY

Site lies at the edge of a fairly level plain that stretches a number of kilometers to the north and east but is limited by low hills at the south and west. The terrain thus contrasts with that of Labna and Sayil where the ruins lie in basinlike valleys.

WATER SUPPLY

No natural water supply known. Nearest currently known permanent natural water at Chac (see p. 138), 3 or 4 km away. Many chultuns at site. Nearest modern well at hacienda of Santa Ana.

MAPS

Sketch maps by Stephens (1843, 1:385) and by Marquina (1928, p. 67). Abbreviated map published by Brainerd (1958, map 16) is based on map given here (fig. 281).

SIZE

Principal structures lie within an area approximately 1 km north-south by 1.2 km east-west. To the north, east, south, and west, small buildings and groups of buildings continue over the plain and low hills in seemingly endless array, and raise once again the question of where to draw the limits of a site. Kabah boasts more large structures, in the monumental sense, than any site we have previously described.

CIVIC PLAN

North-south axis of site again is marked by system of causeways as seen at Sayil (fig. 164) and Labna (fig. 3). In contrast to other ruins, however, principal pyramid temple at Kabah rests at northern terminus of causeways while a lesser pyramid-temple forms the southern terminus. This intracity system of roadways running from Structure 1B2 at the north to Structure 3B1 at the south is not to be confused with the great intercity causeway running north from Structure 1B1 that reputedly extends to Uxmal. Again in contrast to Labna and Sayil is the development of large and important building complexes to the east and west of the central axis of the site. These great complexes overshadow the north-south alignment of structures and form an east-west axis that is not seen at the other cities.

While the overall plan of the site clearly conforms to the generally scattered arrangement of Puuc cities, there is a somewhat greater accent here on the contiguous or adjacent court, particularly noticeable in the main eastern group, than we have seen elsewhere.

Plans of only a few of the small structures that presumably mark the remains of dwellings are shown on the map (see Ruppert and Smith 1957, pp. 582–583). It is my impression that there is a lighter concentration of buildings of this sort at Kabah than at Sayil, but this is a highly subjective opinion and might arise from less intensive exploration of the site.

See G. F. Andrews 1975, pp. 322–327, for further discussion.

Orientation. Usual strong tendency for one axis of each structure to fall slightly east of north. Orientation of this axis probably averages about 13° east of north, very similar to Sayil.

DATE

J. E. S. Thompson (1954, p. 97) suggests that a date on the sculptured doorjambs in Structure 2C6 may perhaps correspond to A.D. 879 (10.2.10.0.0).

REFERENCES

G. F. Andrews 1975, pp. 322–339.
Catherwood 1844, pp. 18–19, pls. 16, 17.
Charnay 1887a, pp. 380–390.
Mariscal 1928, pp. 61–69.
Marquina 1951, pp. 758–762.
Pijoan 1946, pp. 469–475, figs. 753–764.
Proskouriakoff 1946, pl. 17.
Reygadas 1928, pp. 217–221.
Stephens 1843, 1: 384–413.

NORTHWEST GROUP

(Structures 1A1, 2)

Hilltop group of two large buildings and several smaller ancillary structures rests on crest of ridge at western edge of site (fig. 281). Group looks over city to east and directly faces principal pyramid temple (Str. 1B2). Quite obvious that main approach to group was from east.

I have no notes on the elaborate system of courts and terraces that make up the group, other than that the platform supporting Structure 1A1 is about 1 m higher than that supporting Structure 1A2. My memory is that very little masonry of retaining walls and stairways was showing. There are several large pits or cave-ins in the courts and terraces (see fig. 281), which undoubtedly represent the remains of collapsed chultuns. Most of the smaller subsidiary structures in the group were probably dwellings or associated domestic buildings built partly of perishable materials.

Altar 1 rests on the great terrace east of Structure 1A2 (see Monuments, below).

Structure 1A1

(Dzalkabilkik, Edificio de los Dinteles, Structure 18)

Badly fallen two-story building. This is the structure from which came the famous Stephens (1843, 1:403–407) carved wooden lintel. The building is known to the natives as Dzalkabilkik, which I believe may be translated roughly as handprints of blood, derived, of course, from the red prints of hands on the walls of the building (see Decoration, below).

PLAN

See figure 281.

SUBSTRUCTURE

Construction. See Northwest Group, above. I have no notes describing the central fill of the first story which presumably was not visible without excavation. There may well be buried vaults in that area. Otherwise, one would expect the fill to be of rough stone, dry laid.

SUPERSTRUCTURE

Plan. See figure 282.

Section. See figure 283a.

Base Molding. Three-member molding showing in passageway beneath stairway at east (fig. 283a). Nowhere else visible. Restoration of simple base molding at front of second story (fig. 289) is questionable.

Stairways. Front and rear stairways to second story built over half-vaults (fig. 283a). Step stones about .27–.28 m high. Walls of staircase at front (east) faced with dressed stone (fig. 284). This stairway definitely secondary to rooms behind it. Cannot tell period of rear stairway, but probably contemporaneous with rooms on that side (see Secondary Construction, below).

Floors. Not well preserved. Lighter than usual, but probably within range of normal buff color. Step-up to inner rooms is assumed but nowhere visible.

Walls. Those of first story generally normal. Interior facing of walls of Rooms 4 and 5 somewhat cruder than usual. Rear wall of Room 6 conforms to usual practice of employing facing stone of quality used on outer walls

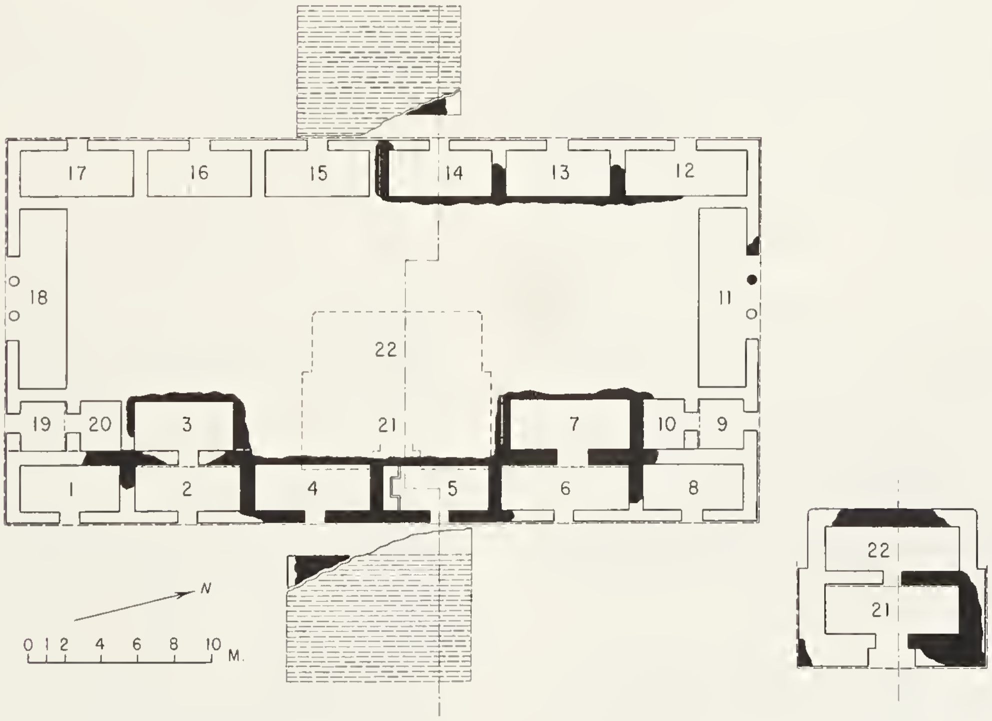


Figure 282. Kabah. Plan of Structure 1A1.

whenever there is doorway leading to inner room. Outer walls run about .62 m thick at doorjambs.

Usual recessed course of wall stone just below spring of vault (figs. 283a, 286).

Walls of second story extraordinarily heavy (fig. 282), possibly owing to addition of decoration. Run 1.50–1.80 m thick where decoration was present. Rough, unfaced wall surface at rear, possibly preparatory to applying decoration, and wall about .90 m thick. Medial wall .80 m thick at doorjambs, and jambs in front door also .80 m thick.

Doorways. Normal classic Puuc, except for wooden lintels. Stephens (1843, 1:403) says, "All the lintels over the doorways are of wood, and are still in their places, mostly sound and solid." At time of my visit only lintels of doorways to Rooms 4 and 5 were standing. Two beams to each doorway. Best preserved is seen to be astoundingly well cut with sharp square edge and surface almost polished. Probably finished by abrasion. Our Indian workmen identified one of four beams as zapote *(Achras zapota)*, other three as chacte viga *(Caesalpinia?)*. No other lintels visible.

Width and position of jamb stone in front doorway of second story, and character of decoration on that building suggest doorway somewhat like that shown in plan (fig. 282), a design characteristic of entrances portraying a serpent's mouth.

One doorway column, apparently made from a single stone, visible in doorway to Room 11.

Wall Depressions. One-tongue cordholders (see fig. 234a, b) and rod sockets in jambs (see fig. 146b).

Bench. One example observed at south end of Room 5. Bench carries recess at center (fig. 282) and moldings at top and bottom (fig. 283a).

Vaults and Beams. In most respects normal. At places vault stone rather specialized in shape (fig. 285a). Stone seems to run slightly larger (.40 × .50 m maximum on face) in west vaults. Vault of Room 7 does not employ usual small projecting course (corbels) beneath capstones. Common arrangement of beam holes is that shown in figure 286a.

Lack of debris indicates second story was not vaulted. May have carried perishable roof, beam-and-masonry roof, or may not have been completed (see Pollock 1970, p. 65, for similar situation). Unfinished nature of outer surface of rear wall suggests last alternative.

Moldings. Wall of early building with battered upper wall zone and three-member cornice molding (fig. 286) has been exposed by fallen masonry of wall between Rooms 14 and 15.

Elsewhere only first member of medial molding is anywhere preserved and visible (figs. 283a, 284), This molding shows in front of Rooms 4 and 5 and on buried wall at south end of Room 7.

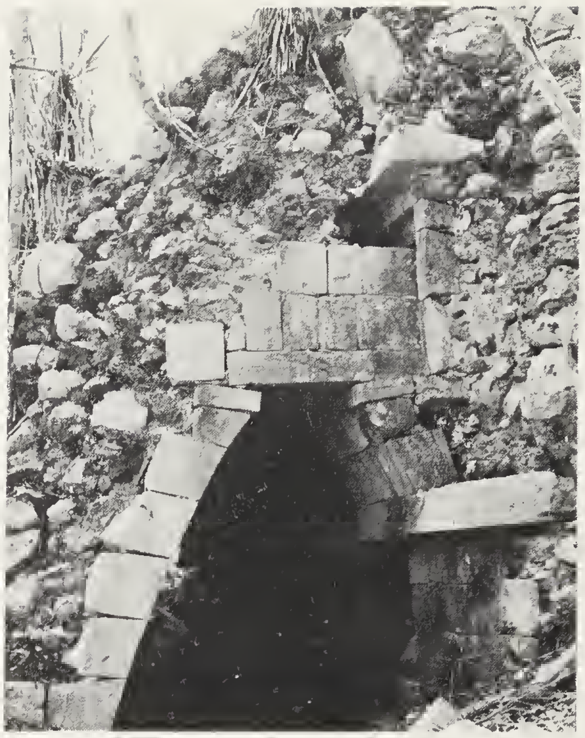


Figure 284. Kabah, Structure 1A1. View of half-vault under east stairway, looking southwest, and showing dressed stone facing of staircase, medial and cornice moldings, and edge of buried fret on upper facade.

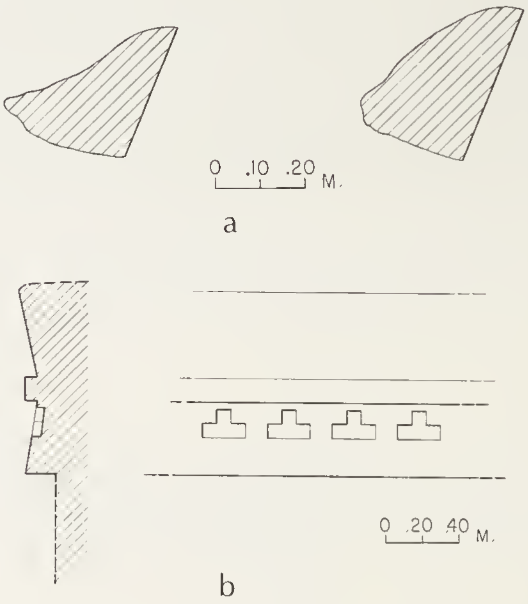
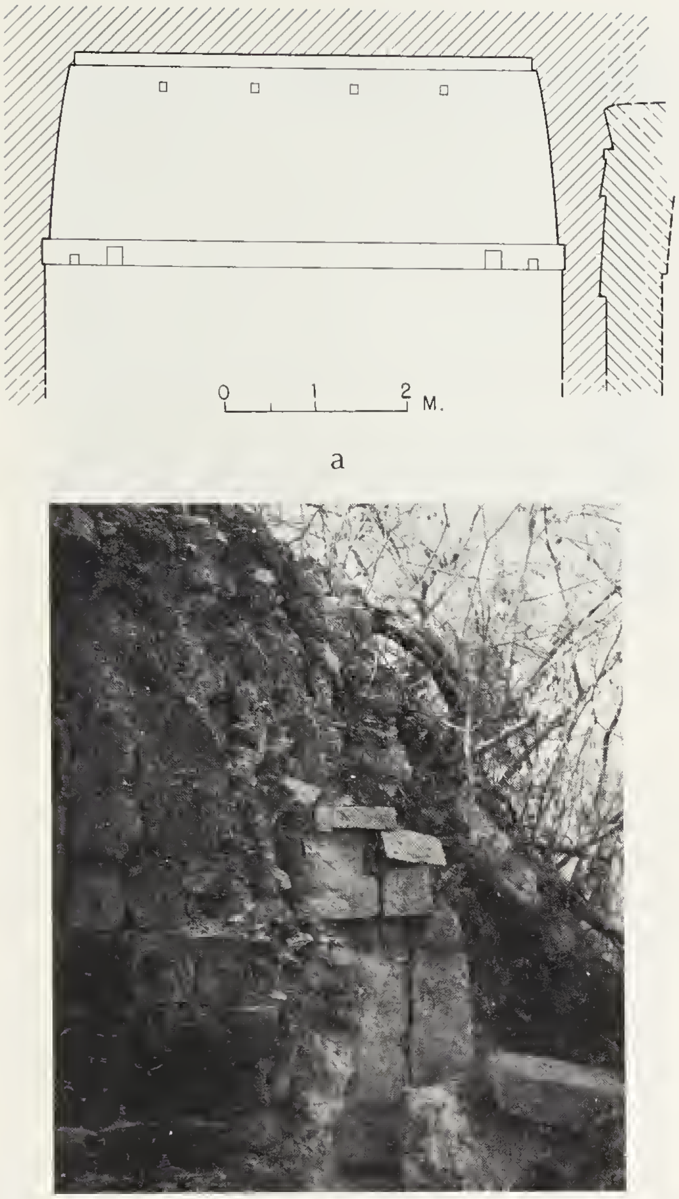


Figure 285. Kabah, Structure 1A1. Architectural details: a, typical vault stones, in section; b, section and elevation of cornice molding on lower story.

Four-member cornice molding with simple stepped or tau design in second member (figs. 284, 285b) is preserved in front of Rooms 4 and 5 and may be seen buried at places behind Rooms 1 and 2.

Decoration. Facade decoration on first story preserved only behind east stairway (fig. 284). Enough of this can be seen to be certain decoration consisted of fret with small colonnettes below it and split columns and squares



a

b

Figure 286. Kabah, Structure 1A1. Views of Room 14: a, north-south section through room and wall between Rooms 14 and 15; b, south end of room, looking south, and showing end wall of Room 14 and buried old exterior wall between Rooms 14 and 15.

to left of fret. Seemingly almost a replica of decoration on west facade of Structure 1A2 (see fig. 299).

Stephens (1843, 1:403) says that sculptured wooden lintel was in doorway "nearest the staircase," and it seems clear he was referring to the east stairway. The lintel thus could have come from either Room 2 or Room 6, the lintels of Rooms 4 and 5 being still in place at time of my work at ruins. Although we cannot be certain, the Catherwood drawing (ibid., p. 405), showing the lintel removed from the doorway and standing to the north of the staircase, strongly suggests that the carved beams came from Room 6. Proskouriakoff (1950, p. 167) suggests that the date of the carving "is probably not earlier than 9.18.0.0.0 and possibly falls in Cycle 10."

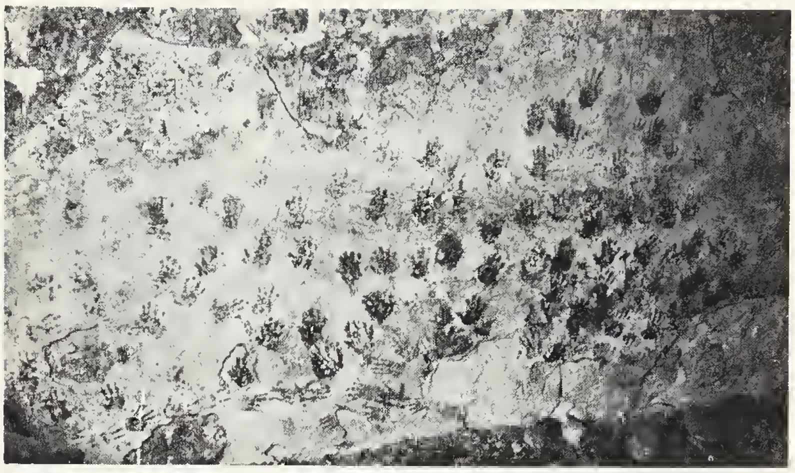


Figure 287. Kabah, Structure 1A1, Room 4. Handprints in red paint on west wall. Note track of prints at lower left of picture.

Red hands imprinted on walls of Rooms 4 and 5 (see Stephens 1843, 1:403) seem to be those of children as they measure only .12–.13 m from base of palm to tip of longest finger. Prints, which are mainly if not always of right hand (fig. 287), appear to have been made simply by dipping hand in red paint. No scheme in arrangement of hands discernible, except continuous track at one place in Room 4 (see pp. 76, 167, 555).

Mass of fallen decorative elements from second story. Most of stones are mask elements, and considerable part of lowest masks at northeast and southeast corners of building still in place (fig. 288). Decoration seems to have extended across front of structure and about halfway back on each side of building.

Masks and other elements of decoration are extraordinarily similar to those on the outer western temple building of the House of the Magician at Uxmal (see p. 240). The Uxmal building is a Puuc imitation of the temples with dragon-mouth entrance found typically in the Chenes region of Campeche (see Pollock 1970), and there is every reason to believe that the upper story of Structure 1A1 represents a similar example. The restoration drawings in figure 289 are, needless to say, highly conjectural. See Proskouriakoff 1950 (p. 167) for comment on the decoration of this building.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Judging by what can be seen without excavation, Structure 1A1 seems to comprise at least four periods of construction. Probably the earliest phase is that represented by the old buried upper facade between Rooms 14 and 15. One can be certain only that this wall is earlier than Room 14, and presumably other rooms to north, but design and workmanship suggest construction earlier than other visible parts of Structure 1A1. What part of Room 15 and what other buried or fallen construction belong to this early phase is unknown.

The second phase seems to be represented by Rooms 1, 2, 4, and 5 and apparently by some buried construction

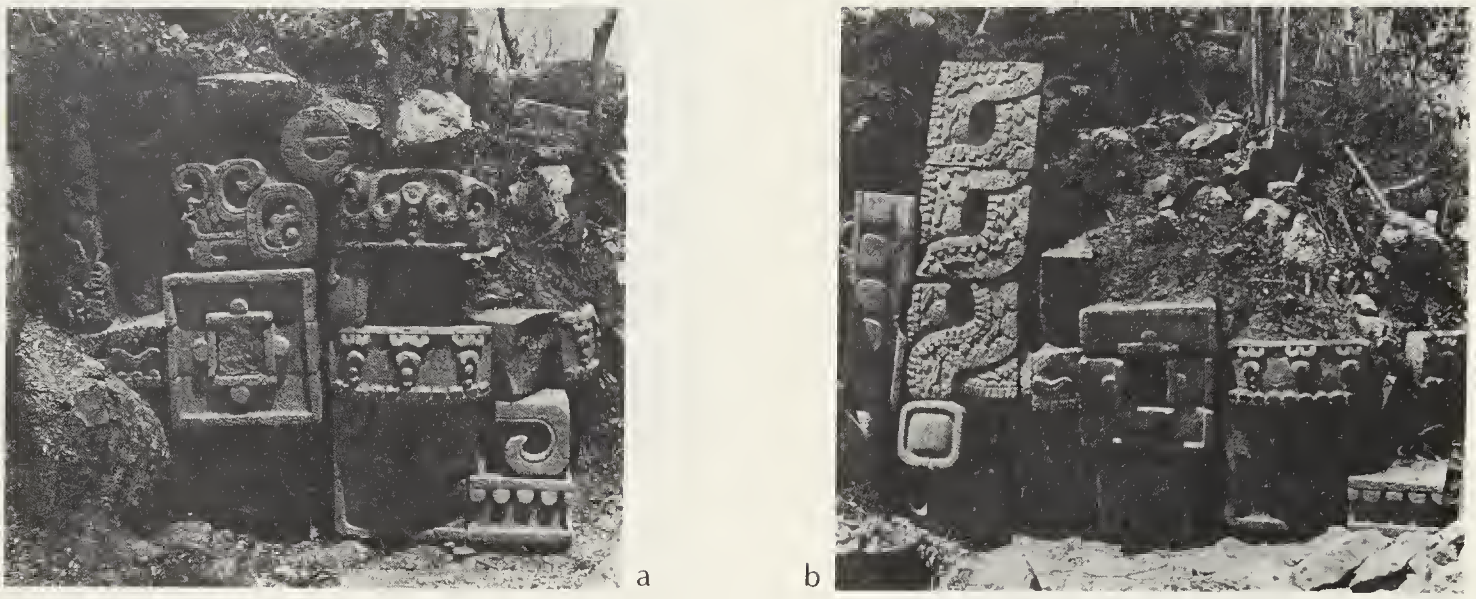


Figure 288. Kabah, Structure 1A1. Remains of corner masks on upper story: a, southeast corner, looking north; b, northeast corner, looking west.

behind Room 5 and possibly behind Room 4. Aside from being obviously earlier than the east stairway, this phase is defined by the medial molding buried in the south wall of Room 7, and by cornice molding on Rooms 1 and 2 that has been built over with the erection of Rooms 3, 19, and 20.

The third phase presumably consists of Rooms 6–14, 3, 19, and 20, and very probably most of the construction of Rooms 15–18. The two stairways and the central fill of the first story may also be assigned to this phase.

Phase 4 is represented by the second story, Rooms 21, 22. Phases 2–4 may well have been an almost continuous operation. The upper temple building may never have been completed (see Vaults and Beams, above).

Structure 1A2

(Edificio de las Grecas)

PLAN AND SECTION

See figures 281 and 283b.

SUBSTRUCTURE

Construction. See Northwest Group, above.

The high and apparently unfinished platform that Structure 1A2 abuts on the west seems to have had a stairway, or the beginnings of a stairway, on its north side.

SUPERSTRUCTURE

Plan. See figure 290.

Section. See figure 291.

Base Molding. Apparently the common three-member base molding with colonnettes in the middle member (fig. 291), but only top member and upper part of one colonnette visible at rear of north wing.

Floors. No observations other than rise in level of floor in Room 8 (see fig. 291). Assume, but do not know, that floor level also rises in Rooms 16 and 17.

Walls. Generally normal, but an extraordinarily heavy medial wall, possibly anticipating some second-story structure, between Rooms 16 and 17 (fig. 290). Difficult to understand reason for thickness of wall between Rooms 5 and 6.

As might be expected, facing stone of outside quality used on west wall of Room 7. Same true of west wall of Room 11, suggesting doorway may originally have been planned in that wall. North wall of Room 6 an old outer wall and east wall employs facing stone of outside quality, indicating it may once have been planned as an outer wall.

Usual slightly recessed course of wall stone immediately below spring of vault.

Doorways. Tend to be exceptionally wide. Doorway of Room 9 carries tremendous span (1.82 m) for stone lintel (fig. 292), which measures 2.20 m long by .65 m wide by .40 m thick. Doorway to Room 8, which presumably carried wooden lintels, is 2.40–2.50 m wide. Doorways to Rooms 16 and 17 are 1.82 m wide and probably had wooden lintels. Remaining lintels supposedly of stone with possible exception of those in outer doorways of Rooms 15 and 18 (but see Stephens 1843, 1:402).

Jambs, where visible, employ two or three full-width stones (figs. 291, 294a) with exception of those of doorways to Rooms 16 and 17 which employ three stones to make up width of 1.02 m. Apparent great thickness of front wall of Room 7 raises possibility of jambs in form shown on plan (fig. 290), somewhat like doorway to upper story of Structure 1A1 (see above), but this is highly uncertain.

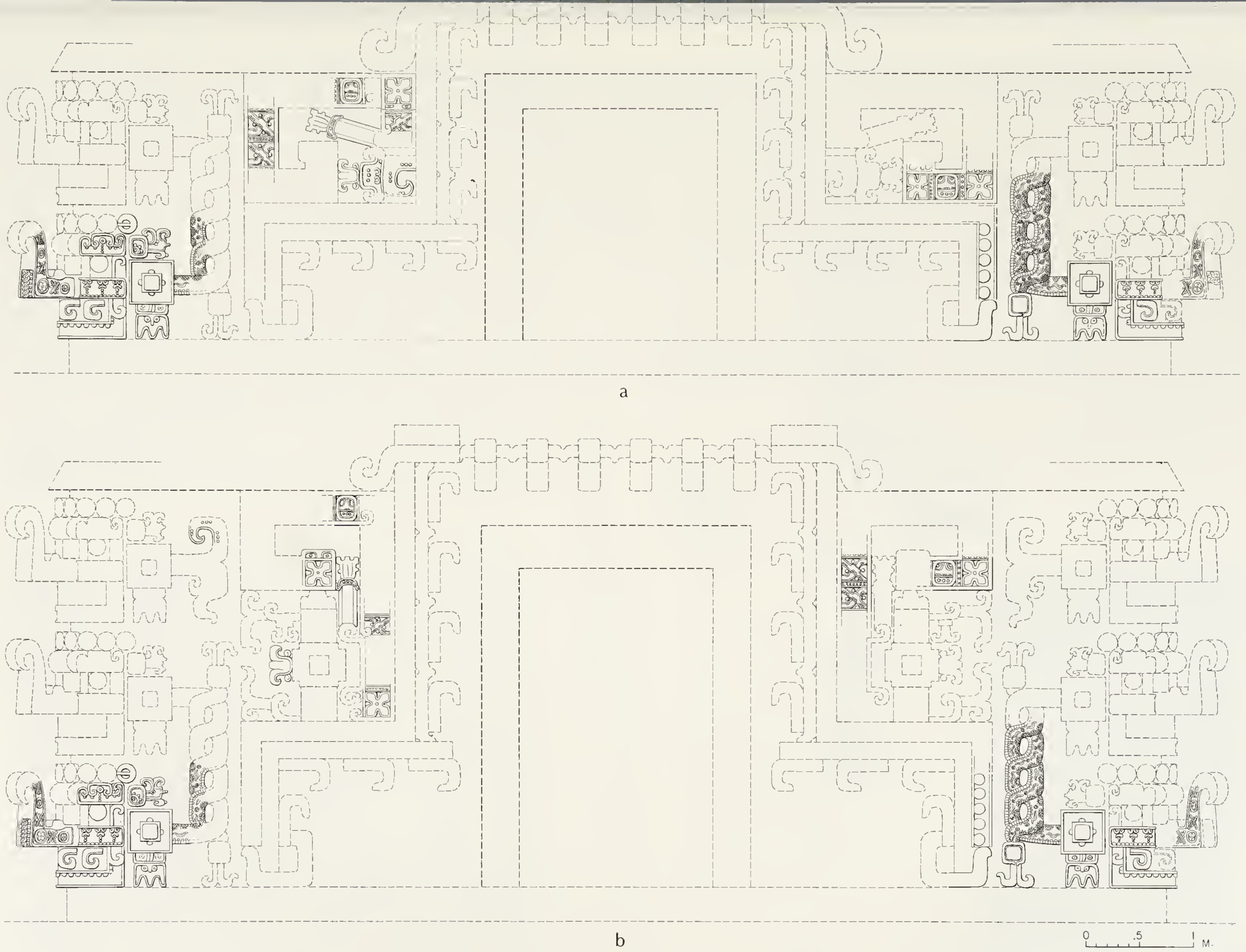


Figure 289. Kabah, Structure 1A1. Restoration drawings of lower zone of eastern facade of upper story: a, restored with two superimposed corner masks; b, restored with three superimposed corner masks.

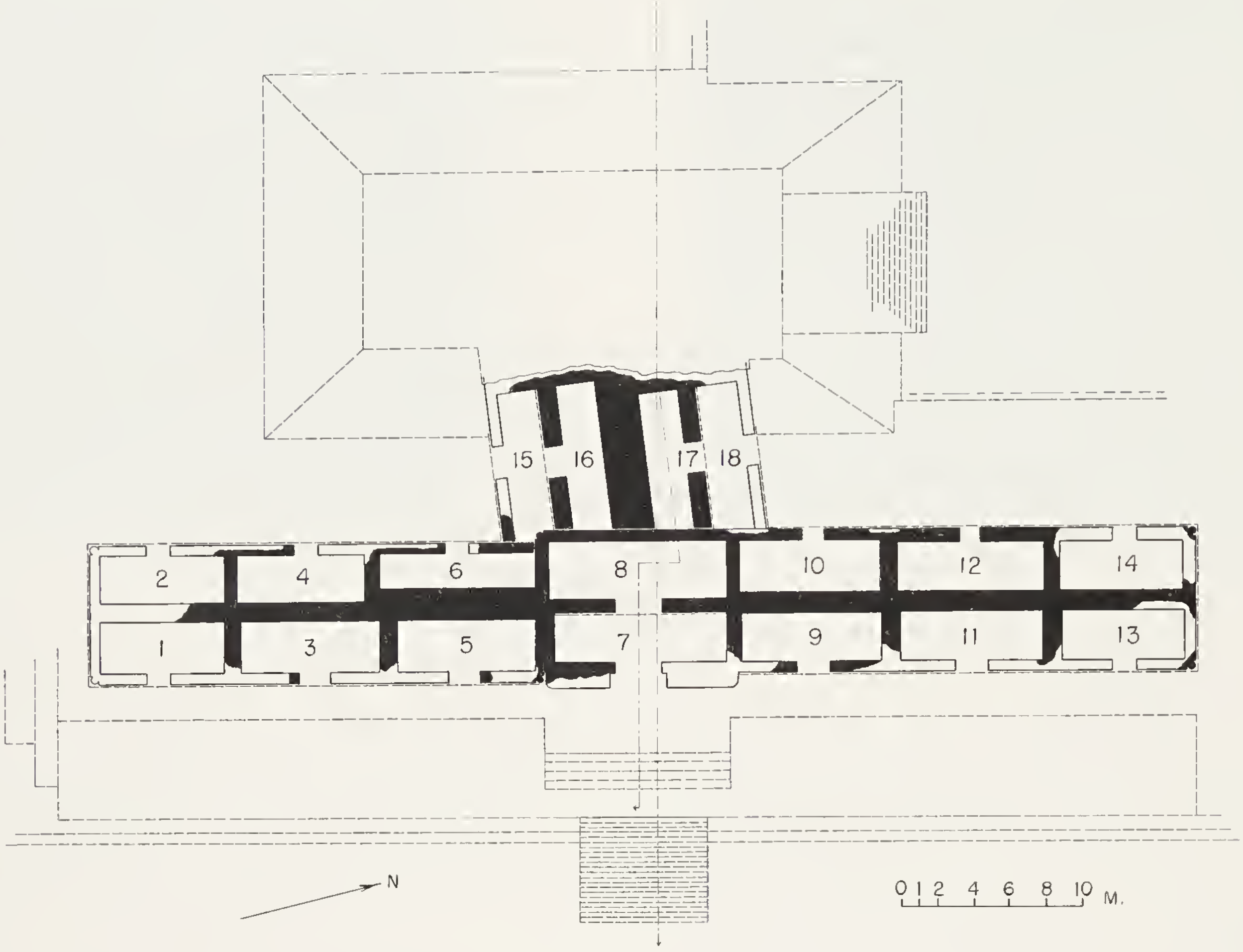


Figure 290. Kabah. Plan of Structure 1A2.

Trace remaining of recessed panel .09 m deep, .24 m high, and about 3.50 m long in spring course above doorway to Room 8 (figs. 291, 294b). Spring course simply set at plane of wall and lintel rather than overhanging in normal manner. These panels seem also to have been present over doorways to Rooms 16 and 17.

Wall Depressions. One-tongue cordholders and usual hemispheroid rod sockets. Cordholders in Rooms 15–18 employ specialized stones (fig. 293).

Vaults and Beams. Vaults in general normal (figs. 291, 294a, 295) except in Room 6, where vault springs from level one course below medial molding.

Beams usually occurred in number of 5 or 6 in course below small offset beneath capstones, and a large beam at each end of room below vault spring. One room with 8 beams below small offset. Room 16 had pair of beams at each end in course above vault spring, and Room 17 had 3 beams at each end in same position (fig. 291). Room 8, with unusually wide vault, had 6 beams in an intermediate position (fig. 294b).

Moldings. Only trace of medial molding (fig. 292) and no cornice molding remains at front (east) of building. Medial molding possibly typical three-member form with lowest apron member, battered colonnettes in middle member, and small rectangular upper member (fig. 291). Moldings on west side of building preserved but for coping course (fig. 299). No trace of moldings visible on outer walls of Rooms 15 and 18.

Decoration. Three-quarter attached column and capital on lower wall zone (fig. 296a) at old outside corner later enclosed by east end of Room 15 (fig. 290). Similar column but with incised decoration (fig. 296b) at northeast corner of building, and assume that all corners carried attached columns in lower wall zone. Simple geometric design of truncated triangles flanked by split columns (fig. 297) in lower wall zone occurs at north end, at front of building, and at rear of north wing (Rooms 9–14). May or may not have been present at south end, at rear of south wing (Rooms 1–6) and on west wing (Rooms 15–18).

Seem definitely to have been masks in upper wall zone of Room 7 and possibly elsewhere on east facade. Several mask elements found in debris in front of Room 7 and three snouts in front of Room 9. Scroll decoration at juncture of facades of Rooms 5 and 7 (fig. 298) suggests corner masks where facade of Room 7 juts forward. Similarity of certain decorative elements to those from second story of Structure 1A1 raises possibility of serpent-mouth entrance to Room 7. Not enough information to be

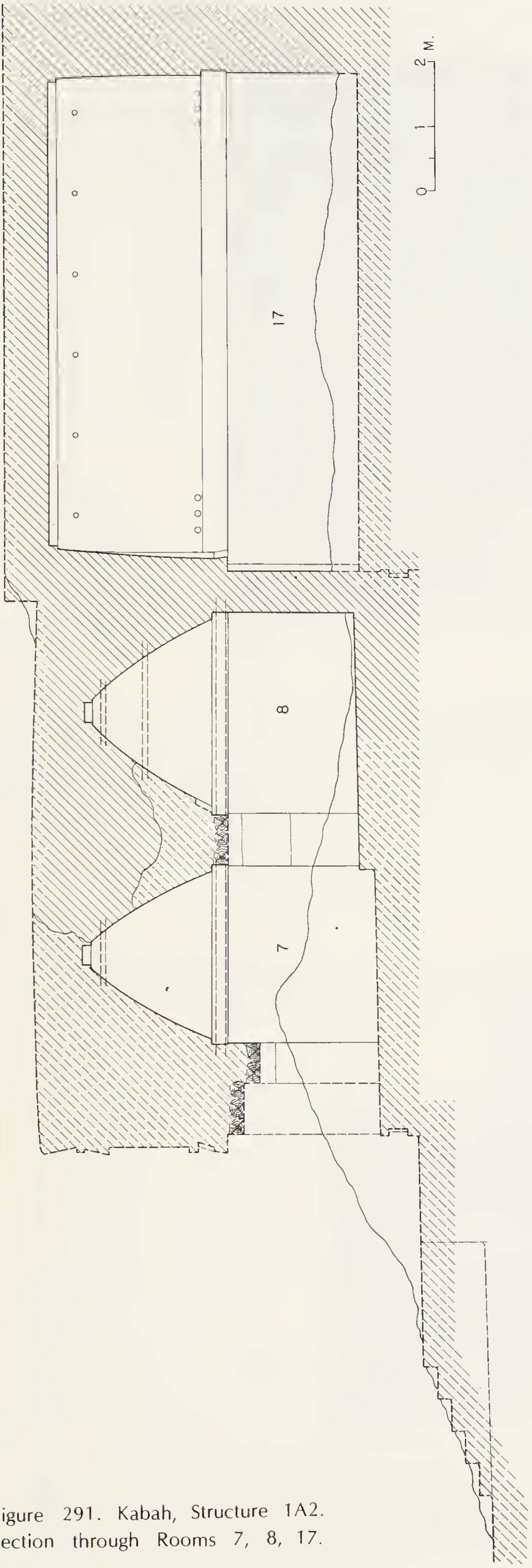


Figure 291. Kabah, Structure 1A2. Section through Rooms 7, 8, 17.

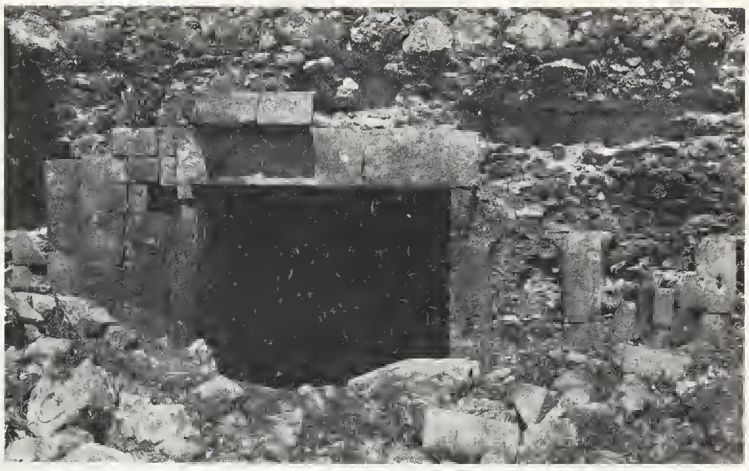


Figure 292. Kabah, Structure 1A2. Doorway to Room 9, looking west.

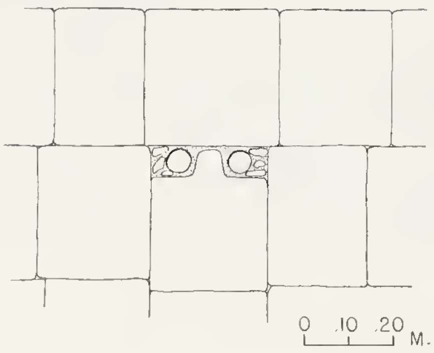


Figure 293. Kabah, Structure 1A2, Rooms 15–18. Type of cord-holder employing specialized stone cut with tongue at one end.

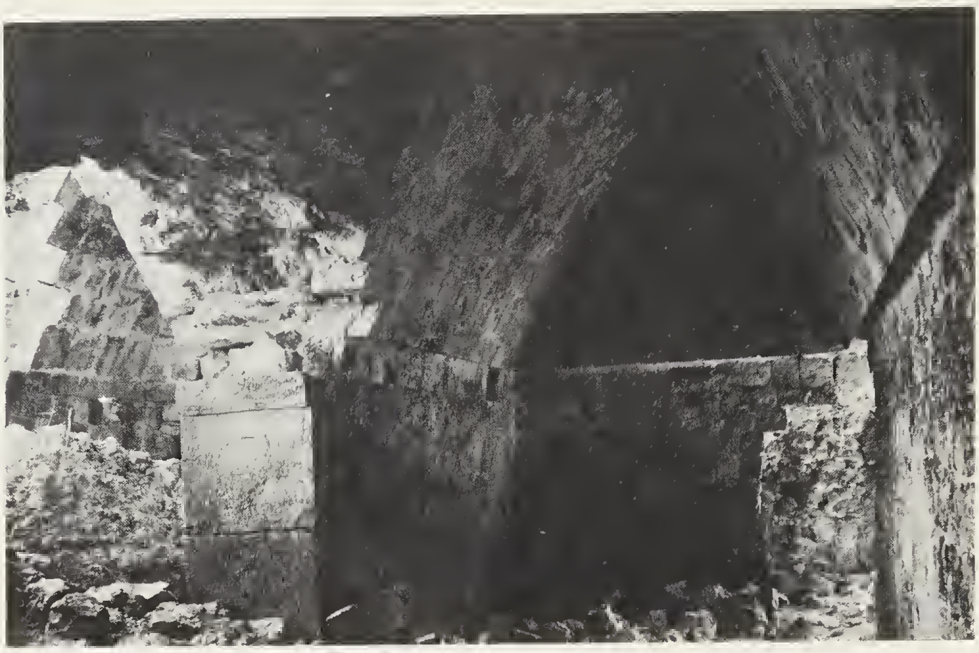
certain. Upper zone decoration at rear of north wing is common fret and split column arrangement (fig. 299), very like that seen on Structure 1A1. Smaller fret at rear of south wing (fig. 295).

Faint but definite traces of painted capstone at center of vault of Room 9.

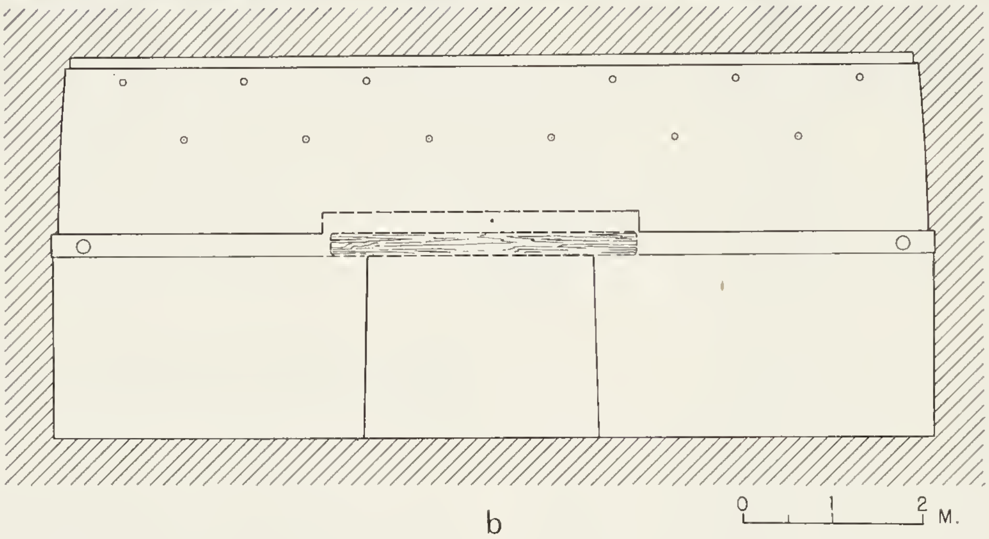
SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Rooms 7–14 seem to form earliest part of building. Question as to secondary character of Rooms 1–6. Room 5 possibly abuts Room 7 in a secondary relation, and Room 6 definitely is secondary to Room 8, but rear wall of Room 6 seems to form contemporaneous joint with wall of Room 8. Usual question arises of time interval and change of plan between construction of lower walls and of vaults. If there is any meaningful difference in time of construction here, upper zone of Rooms 1–6 is later than Rooms 7–14.

West wing (Rooms 15–18) definitely built later than Rooms 1–14. Lower walls of west wing abut, and are not tied into, walls of Rooms 6 and 8, and first member of medial molding on Rooms 6 and 8 carries across ends of Rooms 15–18. Question whether outer wall face above



a



b

Figure 294. Kabah, Structure 1A2, Room 8: a, looking south, showing standing vault and south jamb of doorway to Room 7; b, north-south section and elevation of east side, showing arrangement of vault beams and recessed panel over doorway.

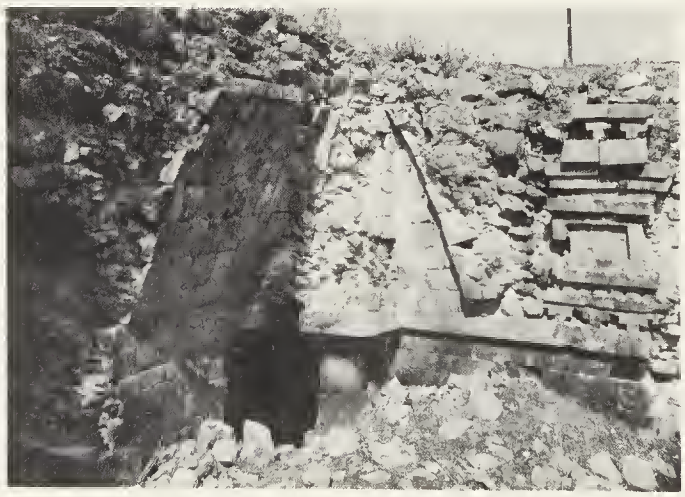


Figure 295. Kabah, Structure 1A2. East end of Room 15 and exterior wall of Room 6, looking east, and showing mostly fallen vault of Room 15, old exterior southwest corner of Room 8, and fragment of facade decoration on west wall of Room 6.

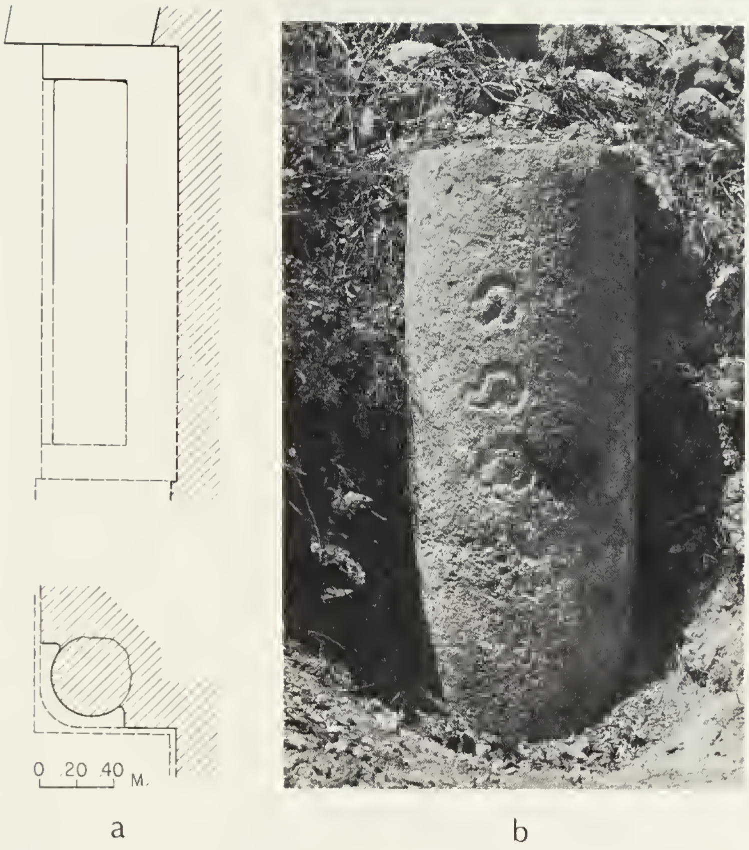


Figure 296. Kabah, Structure 1A2. Corner columns: a, elevation and plan of attached column at old southwest corner of building, later enclosed in Room 15 (see figs. 290, 295); b, attached column with incised decoration at northeast corner of building.

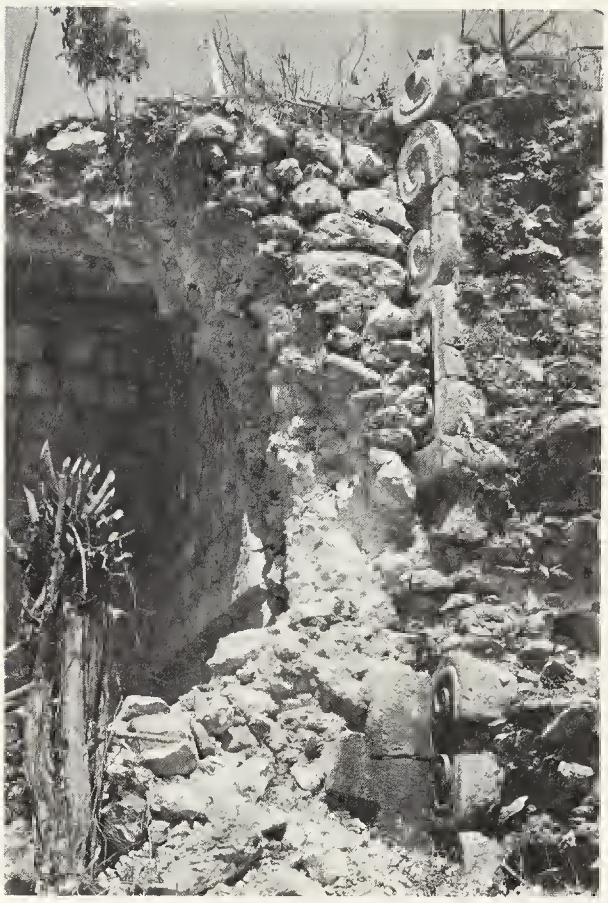


Figure 298. Kabah, Structure 1A2. Juncture of east walls of Rooms 5 and 7, looking northwest, and showing north end of partly fallen vault of Rooms 5, and fragmentary facade decoration on southeast outer corner of Room 7.

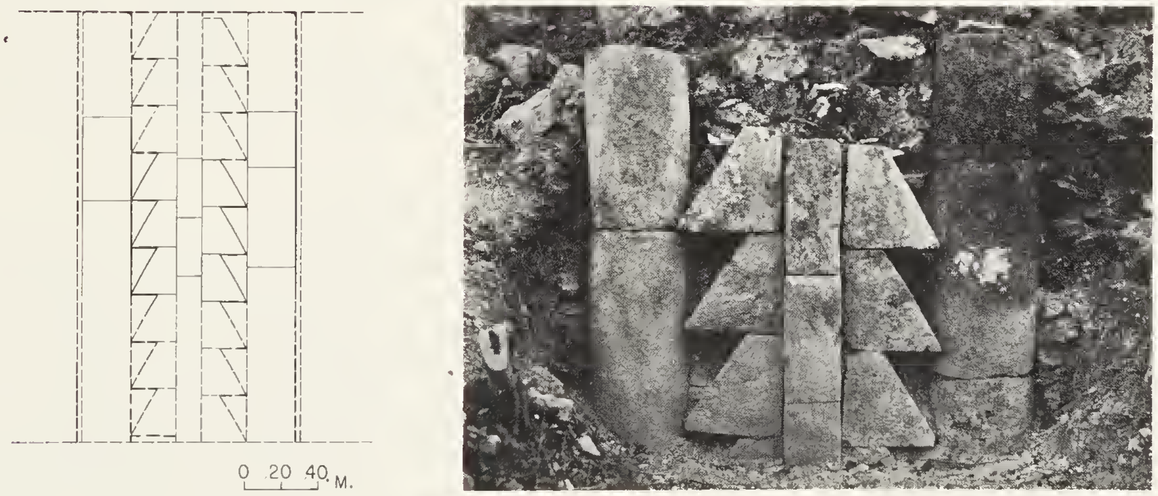


Figure 297. Kabah, Structure 1A2. Wall decoration at north end of building.

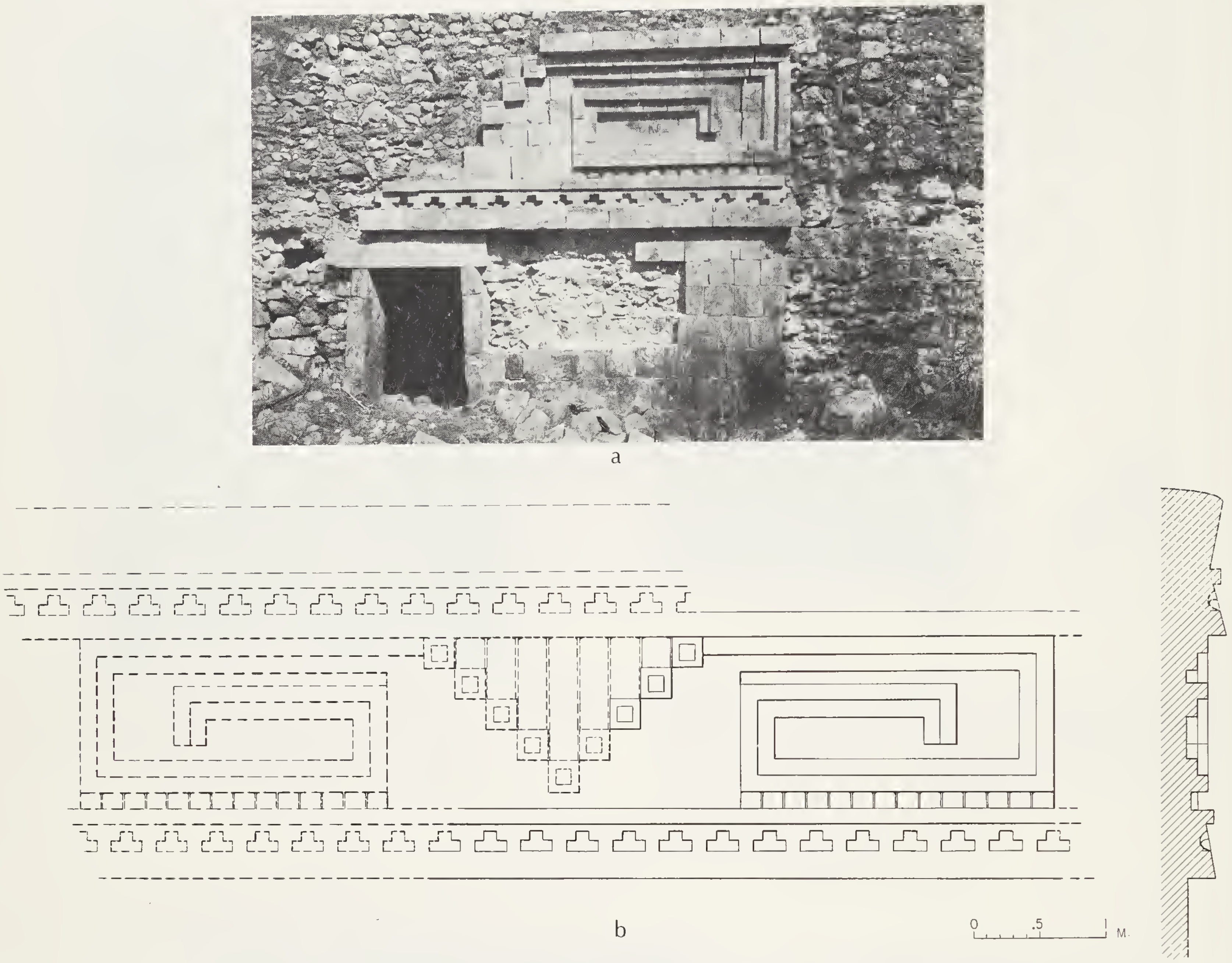


Figure 299. Kabah, Structure 1A2. Decoration: a, facade outside Room 10, looking east; b, partly restored elevation and section of moldings and frieze on same facade.

this medial molding was torn out or never built, but rise in roof level and marked difference in orientation of Rooms 15–18 suggest to me some lapse in time here.

Doubtful that large western platform (fig. 290) was ever completed, and any superstructural building definitely never started.

GROUP OF STRUCTURES 1A3–6

Medium-sized group of badly preserved buildings rests on lower slopes of hill that supports Northwest Group (see fig. 281). Group faces east toward center of city, and main approach seems to be from that side.

PLAN

See figure 300.

CONSTRUCTION

I have no notes on Structure 1A3. Although no columns are shown on the plan, presumably because no column shafts or drums were observed in the debris, a colonnaded entrance of more than two columns, an extremely rare but not unknown practice in Puuc architecture (e.g., see Str. 4, Sabacche), is suggested. The little mound at the east end of Structure 1A3 and the L-shaped mound at the northwest corner of the group are probably remains of domestic buildings.

An intact chultun and one that has caved in are located in the court south of Structure 1A6, and another collapsed chultun was observed a short distance northwest of the group (fig. 281). There are also two chultuns, one intact, one caved in, in the group of mounds just east of Structure 1A3.

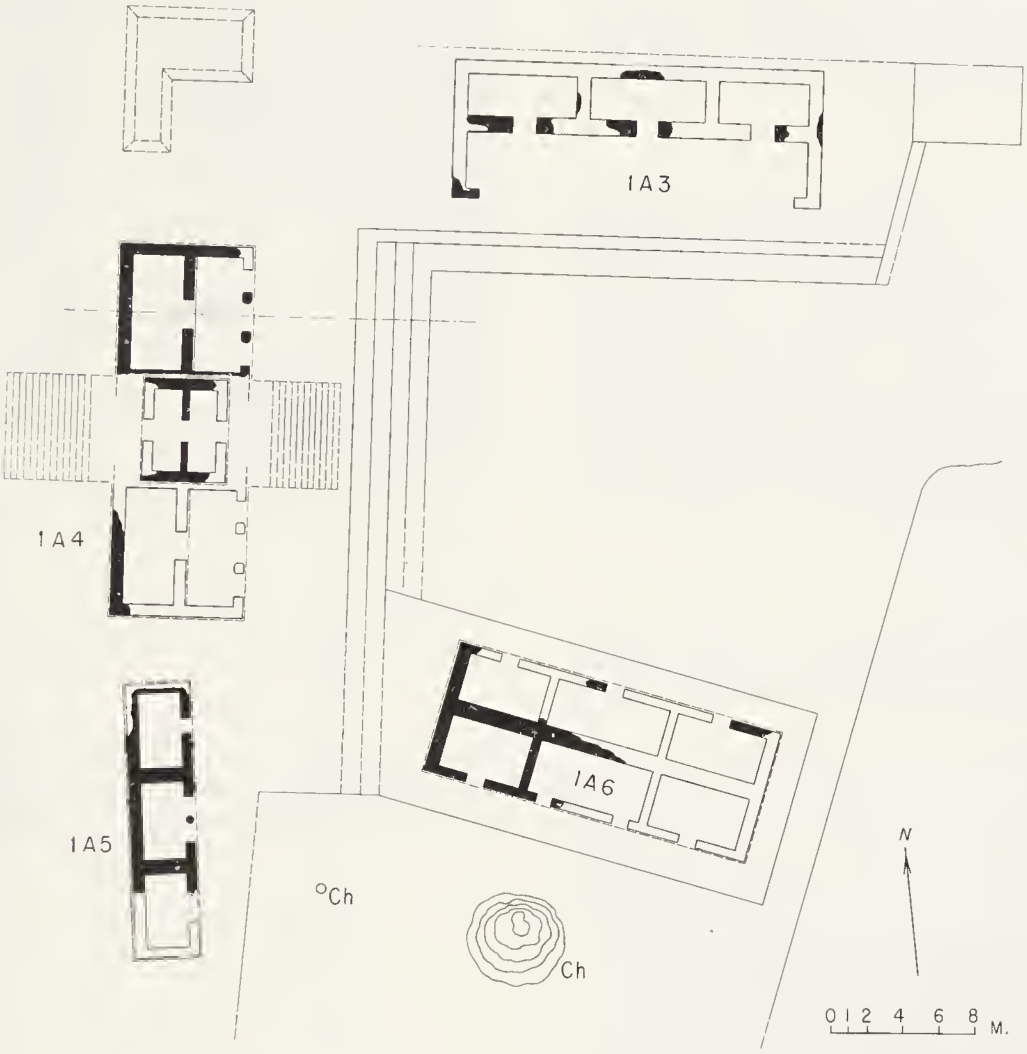


Figure 300. Kabah. Plan of Group of Structures 1A3–6.

Structure 1A4

Badly fallen two-story structure that seems to have been the most important building in the group.

PLAN AND SECTION

See figures 300 and 301.

SUBSTRUCTURE

Stairway. Broad stairway leading from court to Structure 1A4. Risers are battered and measure .40 m high except top step which is .20 m high. Treads are 1 m deep.

Construction. Platform beneath second story may hold buried, and presumably filled, vaulted chambers (see Secondary Construction . . . , below).

SUPERSTRUCTURE

Plan. See figure 300. I have reservations about the accuracy of the plan as shown here. My notes consistently refer to only one stairway to the second story, and the original field notes (Shook and Trik) from which the plan was drawn show a mound, but not necessarily a stairway, at the rear (west) of the building. The plan of the second story, showing passage straight through the structure from front to rear, is most unusual and certainly suspect. My notes say, "Second story light walled and apparently a columnar entrance" (i.e., at east).

Section. See figure 301.

Base Molding. Nowhere visible.

Stairway. Sides of staircase of front stairway (see Plan, above) faced with dressed wall stone. No sign of balustrade.

Floor. Rise of floor level (.21 m) of inner rooms (figs. 301, 302a).

Walls. Generally normal, but two courses below spring of vault slightly inset, rather than usual single course. This seems to be due to great thickness (.43 m) of lintel over inner doorway. Rear wall of northeast room faced with stone of outside-wall quality.

Doorways. Noteworthy for large lintels and shape of columns (fig. 302). Columns intermediate between rectangular and round. Small column of same shape in debris from second story.

Wall Depressions. One-tongue cordholders each side doorway in northwest room. Rod sockets .05–.06 m in diameter and .015–.02 m deep in jambs of same doorway (fig. 302a).

Vaults. Normal but for exceptionally fine, large capstones, beautifully cut, faced, and fitted. Vault also springs one course higher than usual in relation to medial molding (fig. 301).

Moldings. Battered upper wall, in form of broad apron molding, is surmounted by heavy three-member cornice molding (fig. 303). In effect the whole upper wall is a four-member molding. Lowest member of cornice

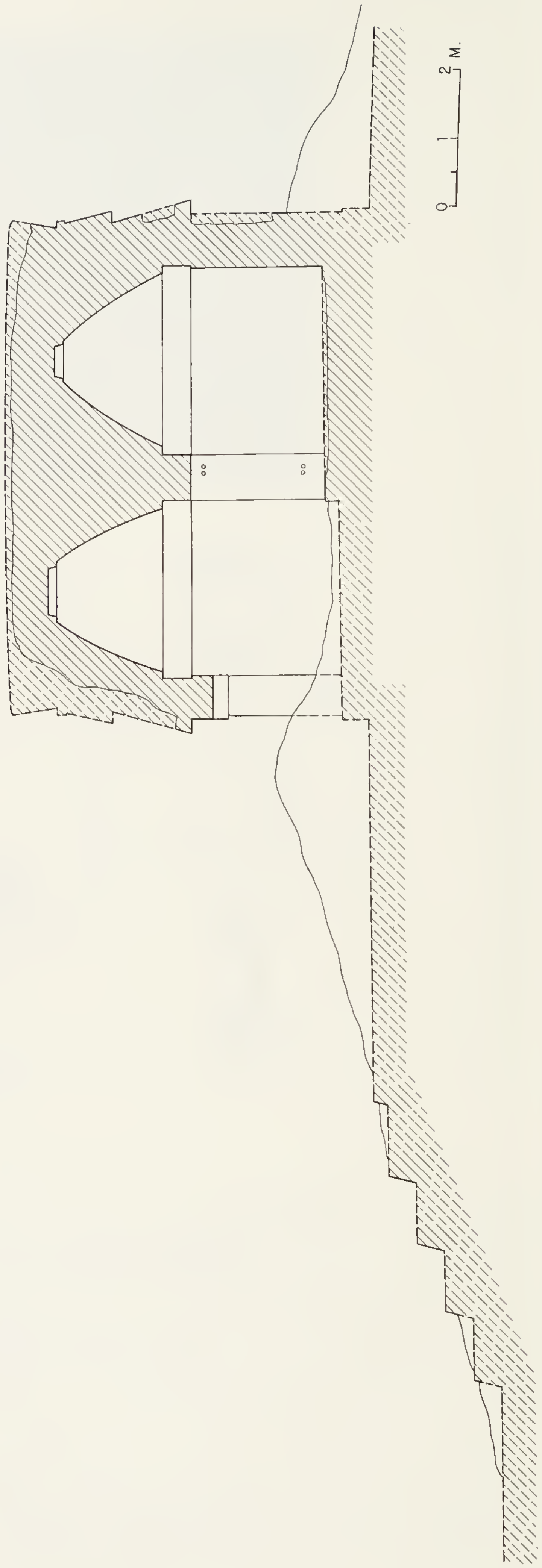


Figure 301. Kabah, Structure 1A4. East-west section through north rooms (see fig. 300).

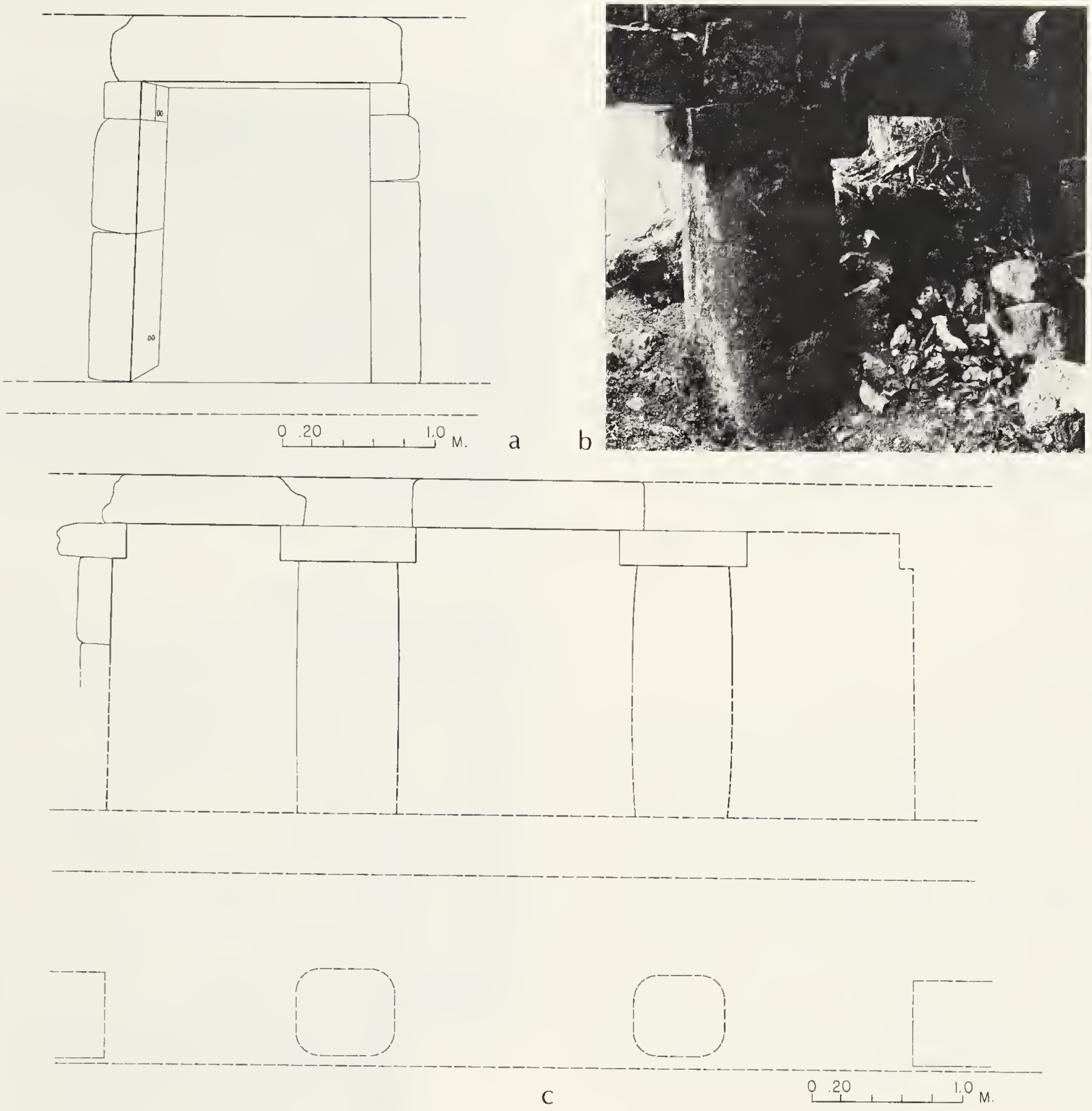


Figure 302. Kabah, Structure 1A4. Doorways: a, elevation of inner doorway leading to northwest room; b, interior view of south column and jamb of entrance to northeast room, looking southeast; c, elevation and plan of entrance to northeast room.

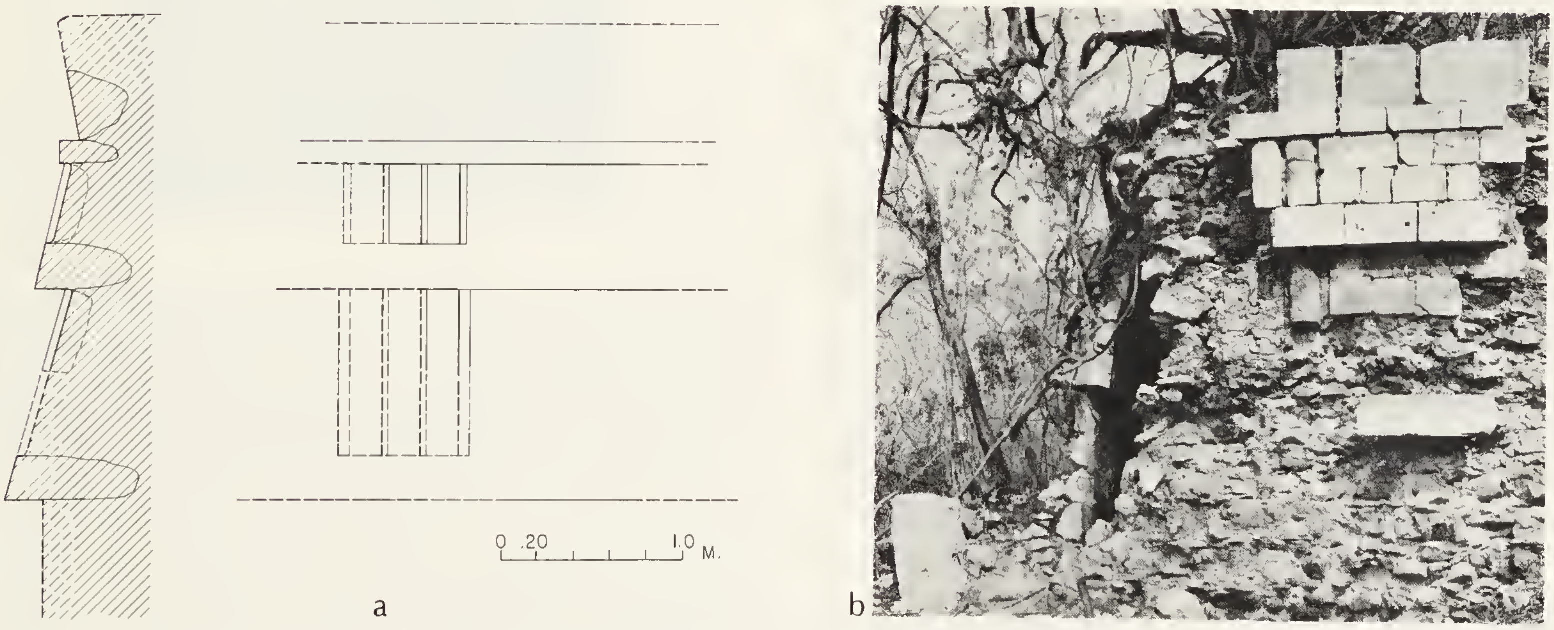


Figure 303. Kabah, Structure 1A4. Moldings: a, section and elevation of upper wall zone; b, view of west facade at northwest corner, looking east, and showing remains of battered upper wall and cornice molding.

molding and apron below carry decoration in form of split columns. Casts in mortar indicate split columns arranged in groups of three. Distance between groups uncertain, but at least 1.15 m and probably 1.40 m or more, as shown by casts of wall stone.

Decoration. Split columns in upper wall zone and cornice molding (see Moldings, above).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Eastern facade runs beneath staircase and stairway and second story appears secondary to first story. May be buried rooms, presumably filled, beneath second story.

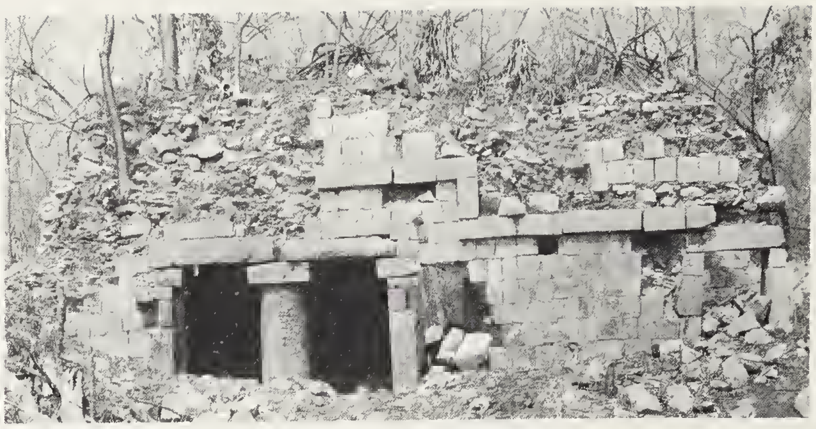


Figure 304. Kabah, Structure 1A5. East facade, looking west.

Structure 1A5

SUPERSTRUCTURE

Plan. See figure 300.

Construction. Outer wall facing of rather small stone (fig. 304). Inside wall facing normal. Central doorway employs single column with rectangular capital and corbel on each jamb (fig. 304). Other doorways of simple rectangular variety. Jambs typically Puuc of full-width stones. Footlike wall projection at each end of center vault (fig. 305a), and one at center of west side of north vault. Last set so far into vault face it could not have served as hook to tie to. Stone in north vault smaller than usual (fig. 305b). Splendidly cut and faced capstones in all vaults. Simple rectangular medial molding that rises over central doorway (fig. 304). Tenon in facade above north jamb of central doorway suggests stucco decoration.

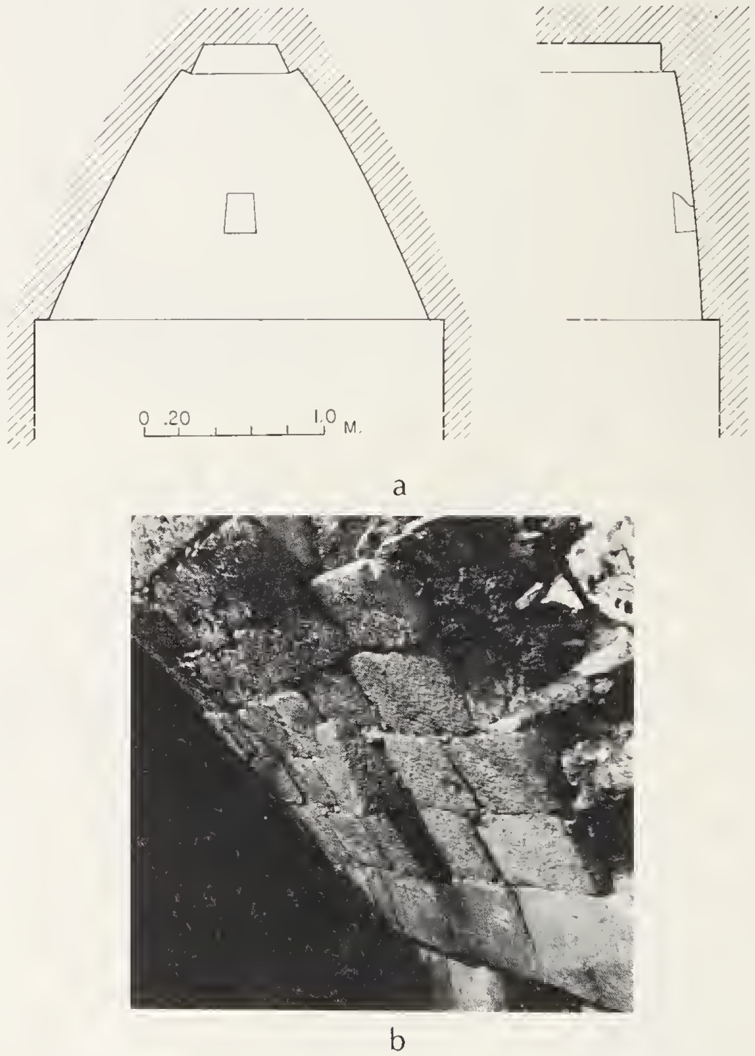


Figure 305. Kabah, Structure 1A5. Wall projections: a, transverse and longitudinal sections of north end of vault of center room, showing footlike projection in end of vault; b, view of west side of vault of north room, looking southwest, and showing projection at center of vault.

Structure 1A6

SUPERSTRUCTURE

Plan. See figure 300.

Construction. Outer wall facing tends to be of small stone (fig. 306a), somewhat in tradition of Structures 2C4 and 3B2 at Sayil. Some of inner wall stone also small (fig. 306b). Doorways narrow. Jambs normal, but lintels very thin. Vaults normal with large capstones as in other buildings in this group (fig. 306b). Only first course of medial molding preserved. Immediately above this course is rough hearting (fig. 306a) as though second member of molding had been made of stucco (but cf. figs. 917b, 918a). Structure 1A6 noteworthy for complete absence of decoration.

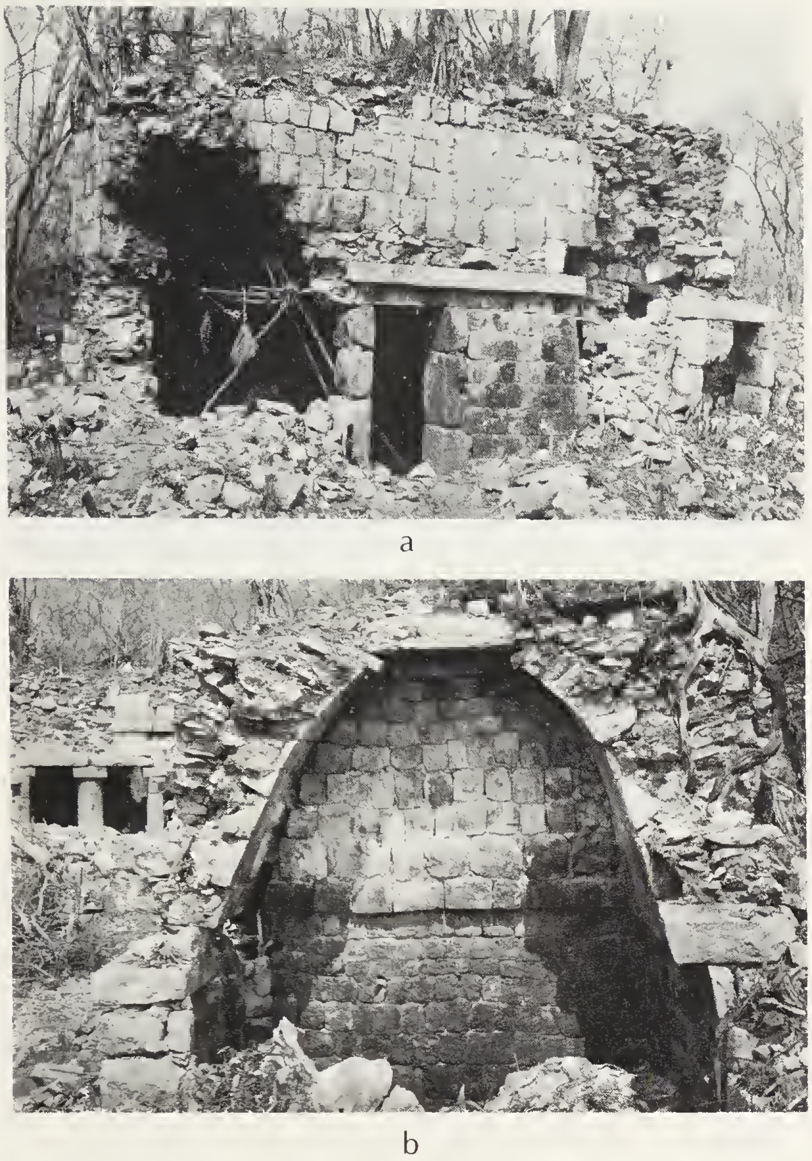


Figure 306. Kabah, Structure 1A6: a, view from southwest (a farmer had set up temporary living quarters in the building); b, south center room, looking west, and showing east end of room and vault in section. Center doorway of Structure 1A5 in background.

Structures 1A7, 8

See West Group, Structures 2A1–3.

Structure 1B1

(Arch, Portal, Portal Vault)

Structure 1B1, a portal vault that has been likened to a triumphal arch, stands at the southern terminus of a causeway that reputedly links Kabah with the great ruins of Uxmal (and see Nohpat and Sacbe). The orientation of the structure is, of course, determined by the course of the roadway. To the south of the portal another causeway leads to a small plaza with badly fallen group of buildings near the center of the site (fig. 281). Just southeast of Structure 1B1 are the remains of a collapsed chultun.

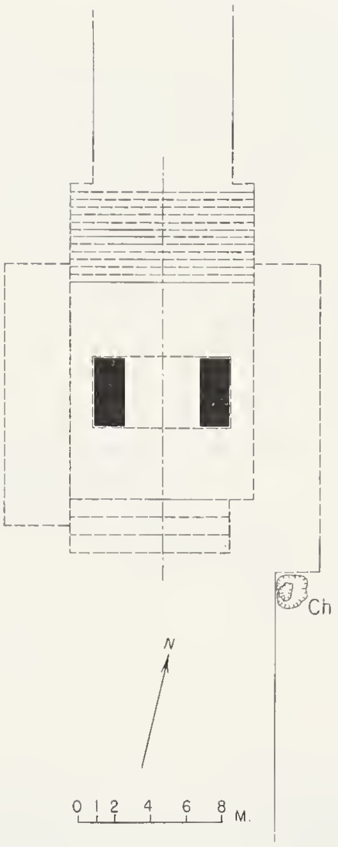


Figure 307. Kabah. Plan of Structure 1B1.

PLAN, SECTION, AND ELEVATION

See figures 307–309.

SUBSTRUCTURE

Stairways. Height of risers in northern stairway about .26 m, about .23 m for southern steps. No information on depth of treads in either stairway (but see G. F. Andrews 1975, figs. 231–233).

Construction. No substructural wall exposed. Assume it to have been vertical and of characteristic masonry (see East Group, below).

SUPERSTRUCTURE

(fig. 310)

Plan. See figure 307.

Section. See figure 308.

Elevation. See figure 309. Largely restored.

Base Molding. Single course of dressed stone that seems to have been more than half buried beneath floor (figs. 308, 309). Molding presumably extends across entrances to portal, in same manner as Structure 11 at Labna (see p. 41), but this was not verified by excavation.

Walls. Well-dressed facing stone of normal size, all of type associated with outer wall surfaces, but not of highest quality (fig. 310). Large cornerstones (e.g., 1.04 × .41 × .32 m).

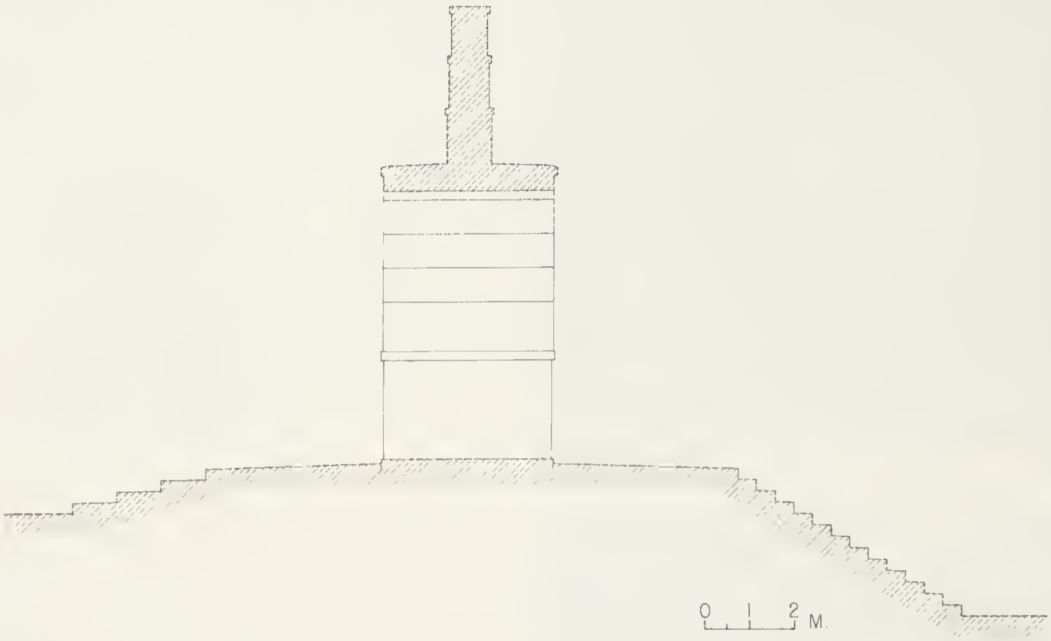


Figure 308. Kabah, Structure 1B1. Longitudinal section of structure and elevation of west inner wall and soffit of vault (partly restored).

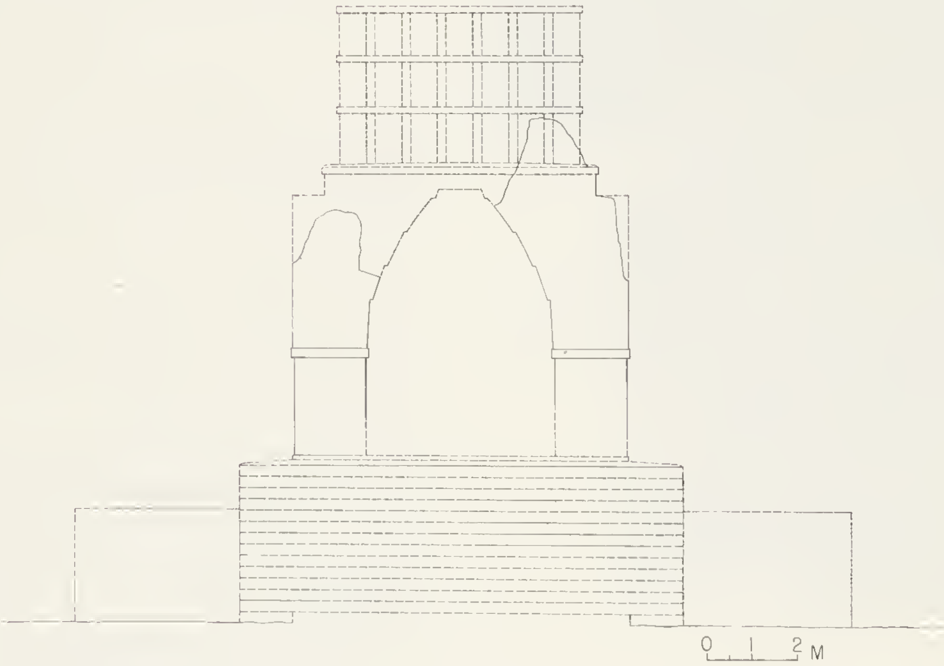


Figure 309. Kabah, Structure 1B1. Restored northern elevation.

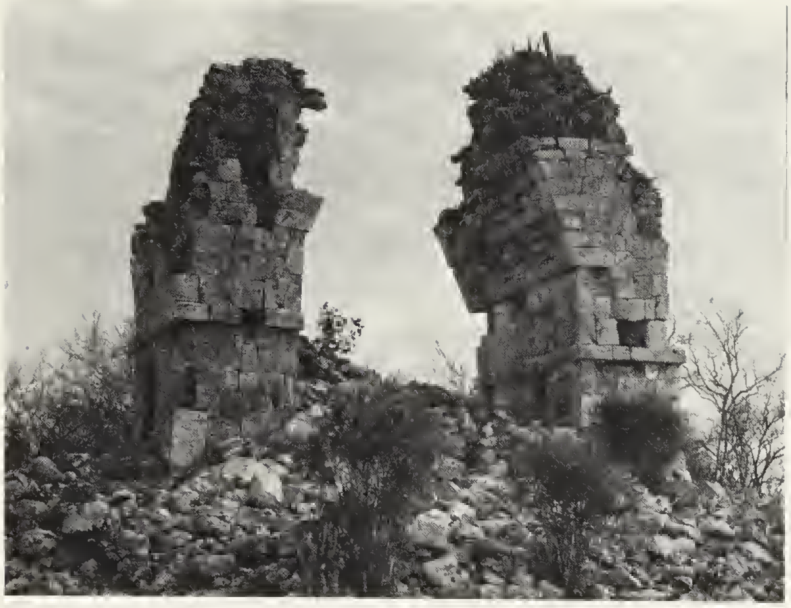


Figure 310. Kabah, Structure 1B1. View from north.

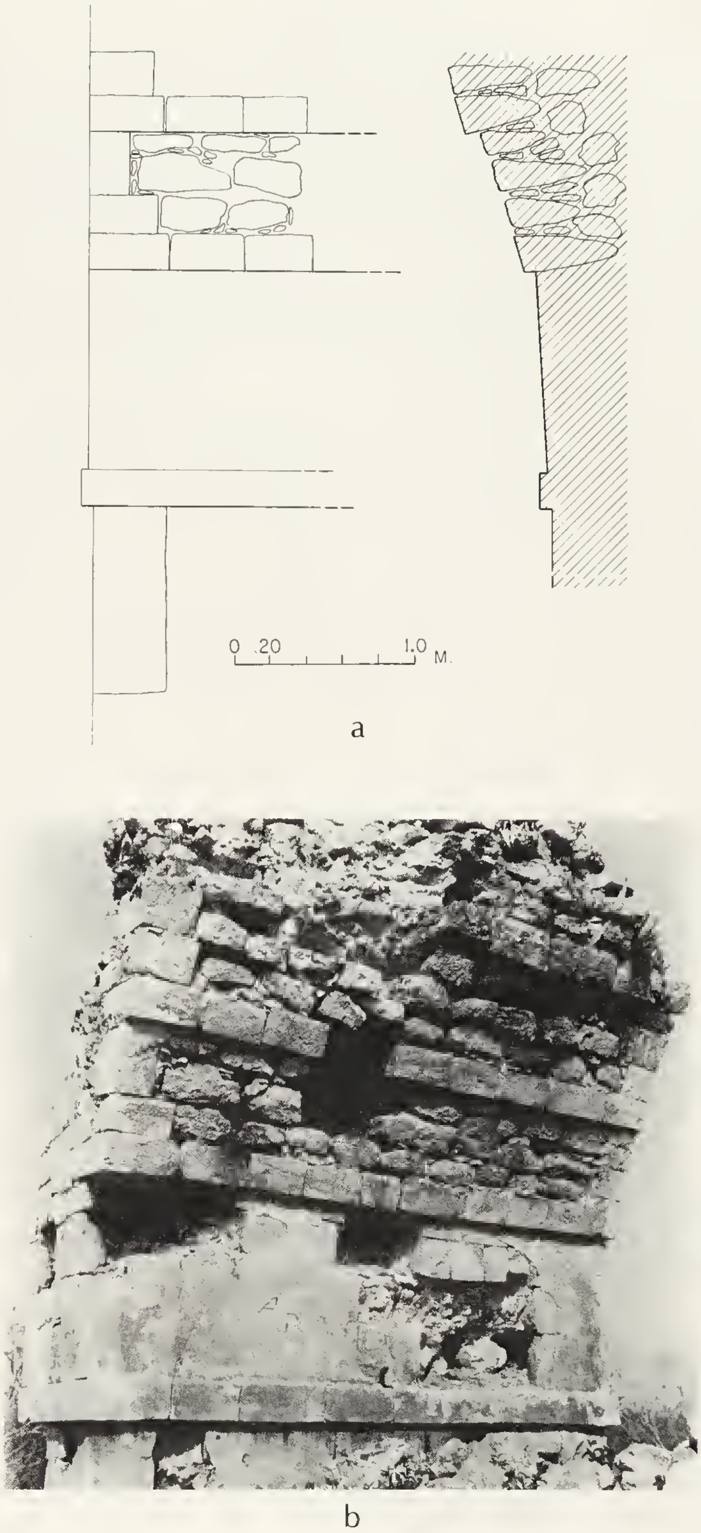


Figure 311. Kabah, Structure 1B1. Vault construction: a, elevation and section, showing large cornerstone, medial molding, and detail of construction; b, west side of vault, looking west, and showing construction above medial molding.

Vault. Unusual in design and construction. Vault springs 1.10 m above medial molding and rises with two more small steps or offsets similar to that at spring (figs. 308, 309). Final offset beneath capstones is no longer present but assumed on basis of normal vault design. Each offset formed by course of dressed stone, and ends of soffit slopes employ cornerstones dressed on two faces (fig. 311). Rough-slab vault stone used inside these "frames" of dressed stone, three courses of slabs within each frame.

No indication of vault beams in spite of great width of vault (4.26 m).

Moldings. Simple rectangular medial molding completely encircles each wall or pier supporting the vault (figs. 308, 311). No trace remaining of cornice molding, but may well have been one.

Roof Structure. Small vertical wall seemingly topped by little rectangular molding still in position high up in masonry of west side of portal, and masonry hearting rises still higher. These remains suggest the previous existence of a roof structure but impossible to tell how portal was finished at top. Elevation (fig. 309) is merely a suggestion.

Decoration. Liberal traces of red paint just below medial molding and elsewhere on outer west wall. Entire lower walls may have been painted red.

GROUP OF STRUCTURE 1B2

An important architectural assemblage located at the northern end of a system of north-south oriented causeways that approximately bisect the city (fig. 281). Structure 1B2, the great pyramid temple that dominates the group and is the principal structure of that type at the site, faces south to a smaller pyramid temple, Structure 3B1, and its architectural assemblage at the southern end of the causeway. The main approach to Structure 1B2 seems quite surely to be from the south.

I have no notes on the great platform or terrace that supports this architectural assemblage. There is undoubtedly a natural eminence here that was leveled by artificial fill and terracing. My memory is that the ground sloped off rather steeply to the north and east.

The large, triple-topped mound along the eastern edge of the platform is now a mass of fallen stone with no standing wall observed. It probably was one of the major structures at the site.

The central passage through the building on the southern side seems to be the main entrance to the group (fig. 281). One would suspect a portal vault here, but the structure is constructed of rather light walls and it is my memory that there was insufficient debris to indicate the fall of a vault. Structure 1B3 is mentioned below.

Four altars, A2–5, seem to be directly associated with Structure 1B2 (see Monuments, below), although Altar 2 may be some distance from its original position.

Structure 1B2

(Pyramid, Principal or Great Teocalis or Teocalli, Great Temple, Castillo)

PLAN AND SECTION

See figures 312 and 313. I have no notes on the two single-room buildings on each side of the stairway at the foot of the pyramid. The end elevation of one building in figure 313 is strictly conjectural.

SUBSTRUCTURE

(fig. 314)

Stairway. Low platform at foot of stairway approached by four steps leading up from causeway. Each step .33 m high and .45–.50 m deep. Well-faced and dressed stone rather like wall stone but longer and deeper. End stones of each step cut on two faces, and ends of staircase made of faced stone.

Great stairway above platform employs very large stones up to 1 m in length, .50 m deep, and fairly consistently .30 m high. Stone is well cut but not finely dressed. Sides of staircase nowhere observed.

Construction. Precise number of terraces not certain as no standing walls of middle terraces are visible (fig. 312). Height of lowest terrace varies owing to falling away of ground level at north and northwest where terrace reaches height of 3.5 m. Two lowest terraces seem to carry considerable batter, whereas those above are either vertical or very slightly battered. Corners of terraces are rounded on an exceptionally large, gentle curve.

Lower terrace walls built of large, well-cut stone, at places over 1 m in length, .50 m high, and .60 m deep. Upper terraces faced with smaller, less well-cut stone, more like stone used in usual substructural wall construction. At places each course of lowest terrace wall is stepped back .10–.20 m (fig. 313b). This may be by design or through slipping, as other walls are not stepped. Rounded corners formed by one or more stones with the face cut on an arc. Stone in terrace walls set in mortar, and wall surfaces probably once plastered. Assume core of pyramid behind terrace walls to be loose rock fill.

SUPERSTRUCTURE

Plan. See figure 312.

Section. See figure 313.

Base Molding. Simple molding of single course of dressed stone visible at rear of building (fig. 313a). Earlier buried base molding beneath floor of rear room. Buried molding painted red.

Walls. Outer walls .65 m thick, medial wall .60 m, transverse walls .78 m. Not much outer-wall facing showing. Only moderately well dressed and fitted. Several very large stones (e.g., .62 × .50 m and .48 × .75 m) observed in lowest course. South face of medial wall of same quality of stone, with some very large stones at bottom. Inner wall facing normal.

Walls now stand in places to plaster stratum marking level of medial molding, 2.40 m above floor inside building.

Doorways. Large, full-width jamb stones up to about 1.40 m in height. No lintels observed and may have been of stone or wood.

Moldings. None in position. Lowest course of medial molding may have been apron member .25 m high.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

No information on relative ages of pyramid, causeway, and buildings at each side of stairway. Tempting to see buildings secondary to stairway and pyramid, but this only a guess.

Buried base molding indicates either earlier building at top of pyramid or base of building enlarged before superstructure was built.

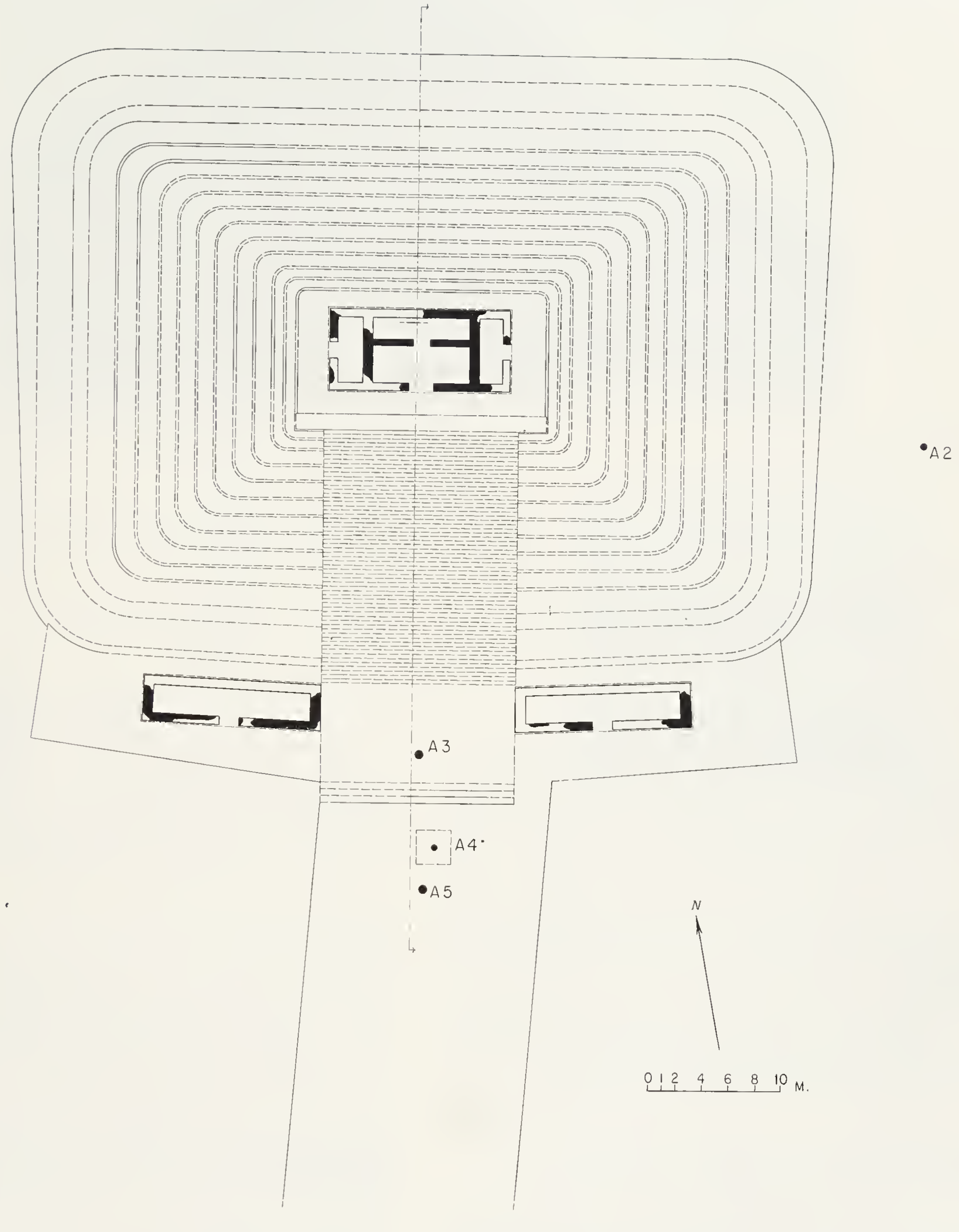


Figure 312. Kabah. Plan of Structure 1B2.

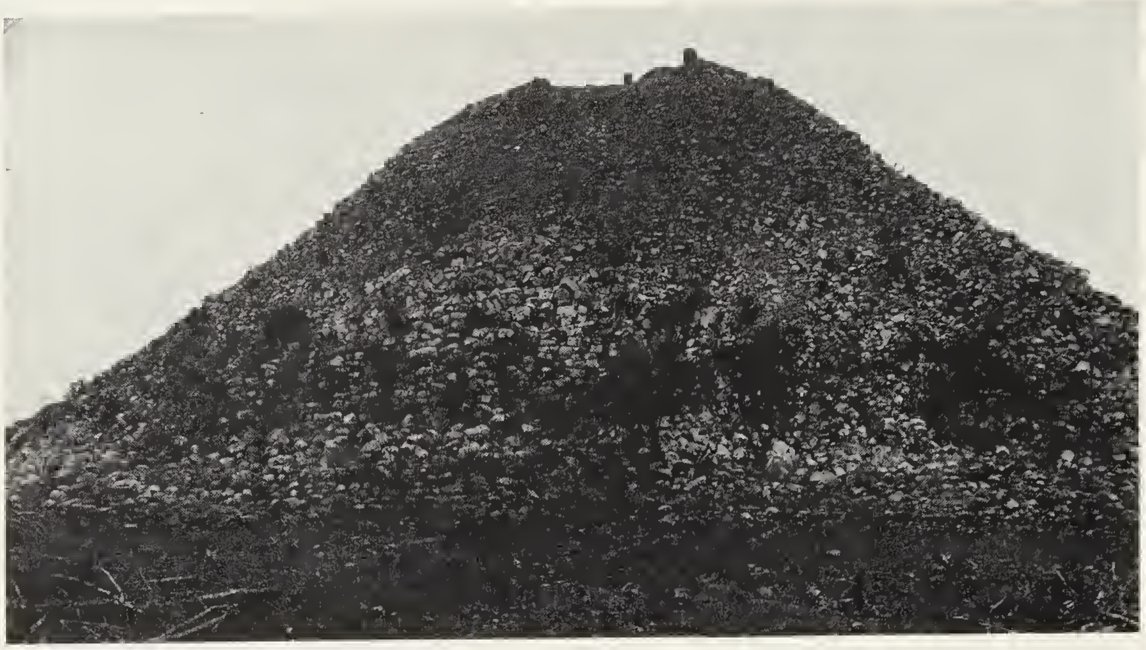


Figure 314. Kabah, Structure 1B2. Pyramid, looking north, and showing remains of stairway and remnant of temple building at top.

Structure 1B3

PLAN

See figure 315.

CONSTRUCTION

Badly fallen pyramidal substructure some 30 m or more in length and approximately 7 m high. Chief interest of structure is that this sizable pyramid is surmounted by a thin-walled building that obviously was never roofed by a vault. Not only are walls too light to support vault that would span the 5-m or more width of room in building, but lack of debris rules out possibility of vault. Construction of this sort on so imposing a substructure is most unusual in Puuc architecture.

The little platform just southwest of Structure 1B3 (fig. 281) is probably the remains of a dwelling or some such structure built mainly of perishable materials.

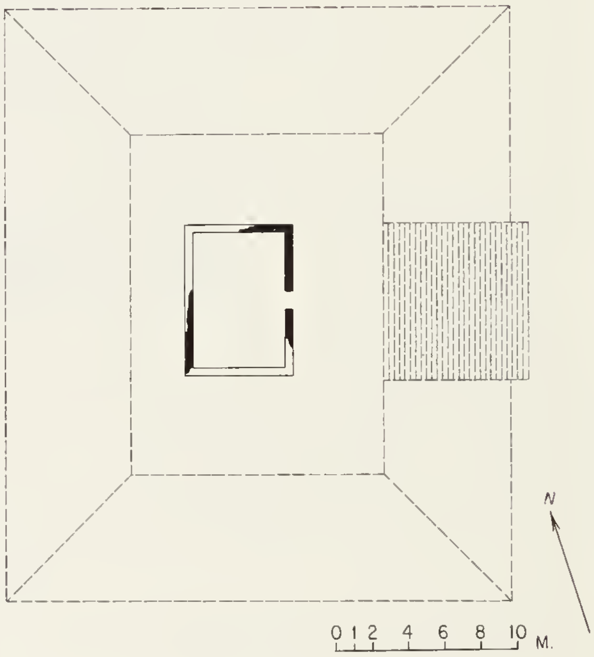


Figure 315. Kabah. Plan of Structure 1B3.

Structure 1C1

(Third Casa, Casa de la Justicia, Templo de las Columnas)

I have no notes on the substructural platform supporting this building. The four small rectangular structures south and southwest of Structure 1C1 appear to be the remains of house mounds (fig. 281). Two chultuns, one with two openings (Ruz 1948, pp. 4–5; 1961, p. 337) were observed in the vicinity of Structure 1C1, although not necessarily associated with it. The first of these is 30 m west of the building, at the north end of a very long mound (fig. 281). The second is 30 m southwest near the northwest corner of the most southern of the house mounds just mentioned.

SUPERSTRUCTURE

Plan. See figure 316.

Section. See figure 317.

Elevation. See Spinden 1913 (pl. 16, fig. 1); Marquina 1928 (second pl. foll. p. 70); and Marquina 1951 (photo 366, rear).

Base Molding. Typical three-member molding with colonnettes in middle member (figs. 317, 318) on all sides of building.

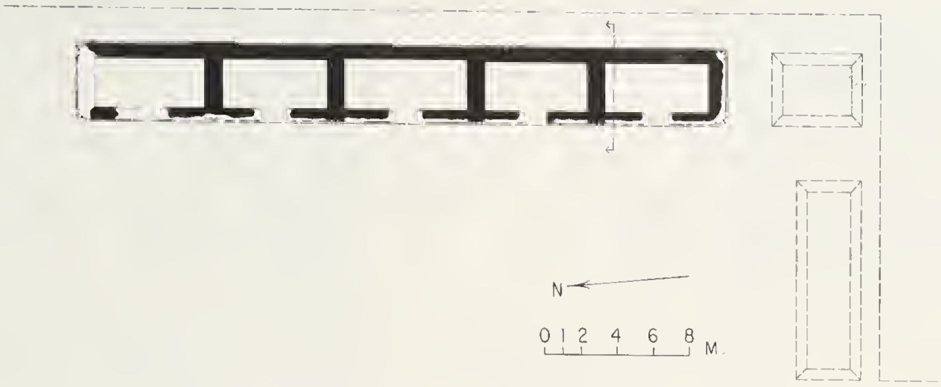


Figure 316. Kabah. Plan of Structure 1C1.

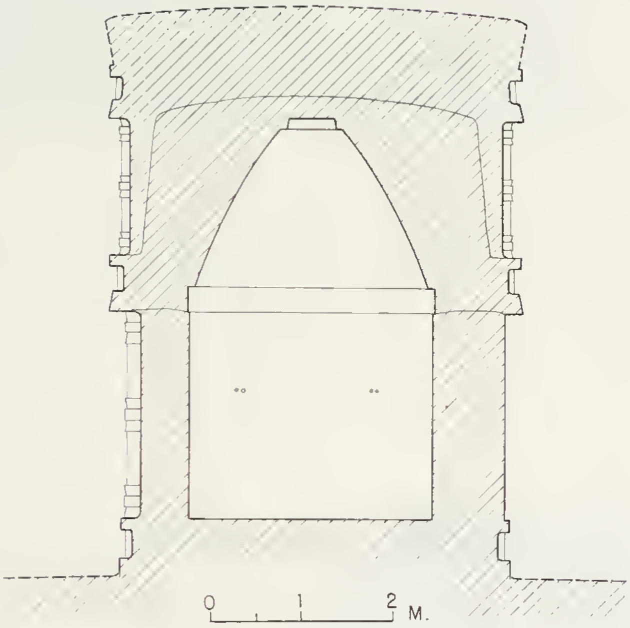


Figure 317. Kabah, Structure 1C1. Section through south room, showing stages of construction of building (cf. fig. 147a). Note cordholders in end wall of room.

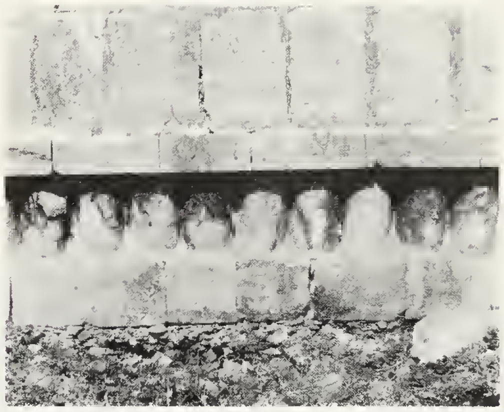


Figure 318. Kabah, Structure 1C1. View of base molding at rear of building.

Walls. Front wall .70 m thick, .63 m at doorjambs. Rear and end walls .90–1.00 m. Exceptional only in being totally stripped of facing stone (fig. 320) except at rear of building. Usual slightly recessed course of stone inside rooms just below spring of vault (fig. 319a,c).

Doorways. Become wider, .08–.10 m from top to bottom. Only one jamb standing. Of usual well-cut and dressed stone extending full width of jamb. Stone lintels.

Wall Depressions and Projections. Two-tongue cordholders of tongue-at-side-of-stone variety (see fig. 197a) on inner walls at each side of doorways. Also one of same type at each end of second room from north, at center of end wall about one-third height of vault spring. Pair of such cordholders on each end wall of south room about half height of spring (fig. 317). Where plaster is still in place, cordholder appears as pair of small holes (fig. 319c).

Stone rings (fig. 319b) set into wall at either side of doorway. Occurred in pairs (fig. 319a).

Vaults and Beams. Nothing unusual. Five beam holes in each room just below small offset beneath capstones, and two large beam holes in course below vault spring (fig. 319a). Two beam holes about half height of vault in two southern rooms. Most of holes distinctly rectangular in outline.

Moldings. Typical three-member medial molding with colonnettes in middle member and almost identical cornice molding with addition of outward-leaning coping course (figs. 317, 320).

Decoration. Split columns and spools in groups of three in lower wall zone (figs. 317, 320a) spaced across front of building to coincide with interior transverse walls and at corners of building (fig. 316). Similar decoration on smaller scale extends all around building in upper wall zone (see Stephens 1843, 1:398).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Excellent example illustrating sequence of construction in raising building (fig. 317; and see fig. 147a). First, lower walls built, capped over with plaster, and presumably

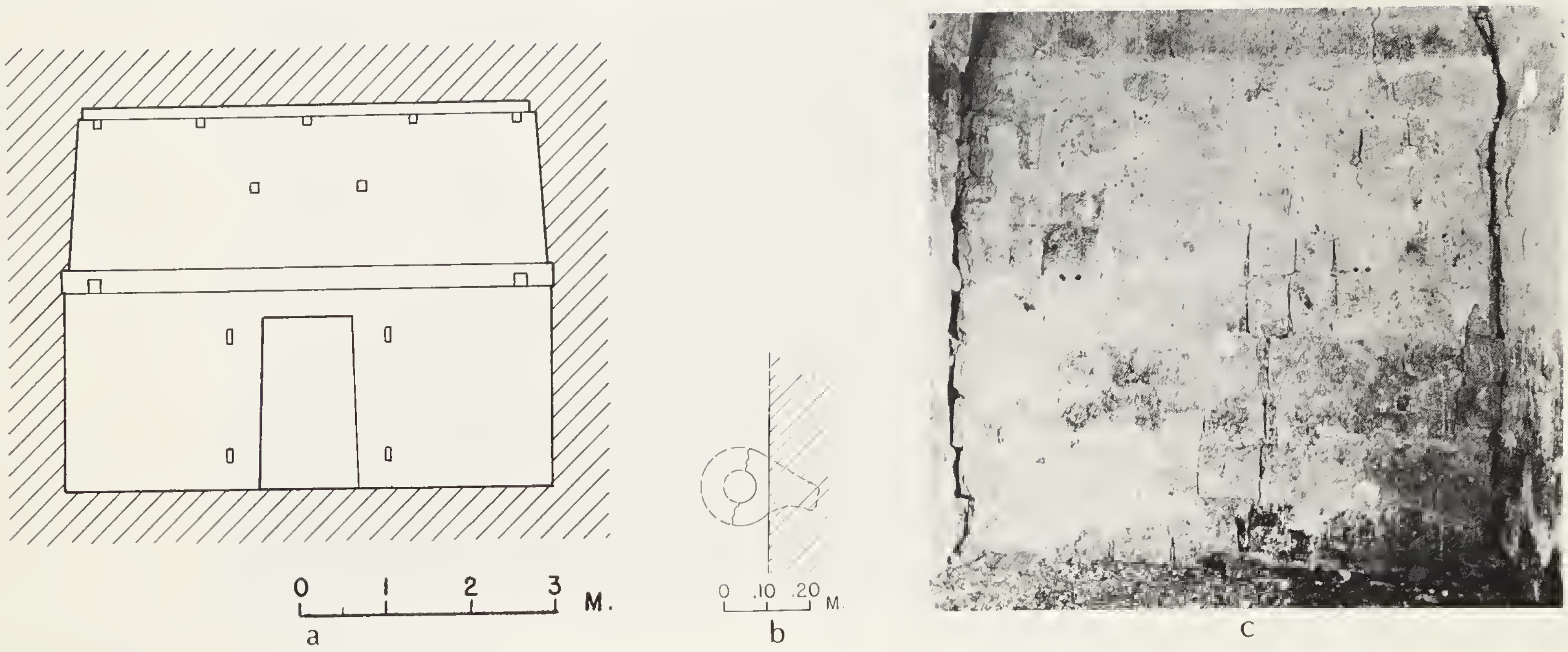


Figure 319. Kabah, Structure 1C1. South room: a, longitudinal section with west wall in elevation, showing stone rings at each side of doorway, and beam sockets below spring of vault and in soffit; b, detail of stone ring; c, south end of room, looking south, and showing cordholders appearing as pairs of holes at half height of wall, and recessed course of stone just below spring of vault.

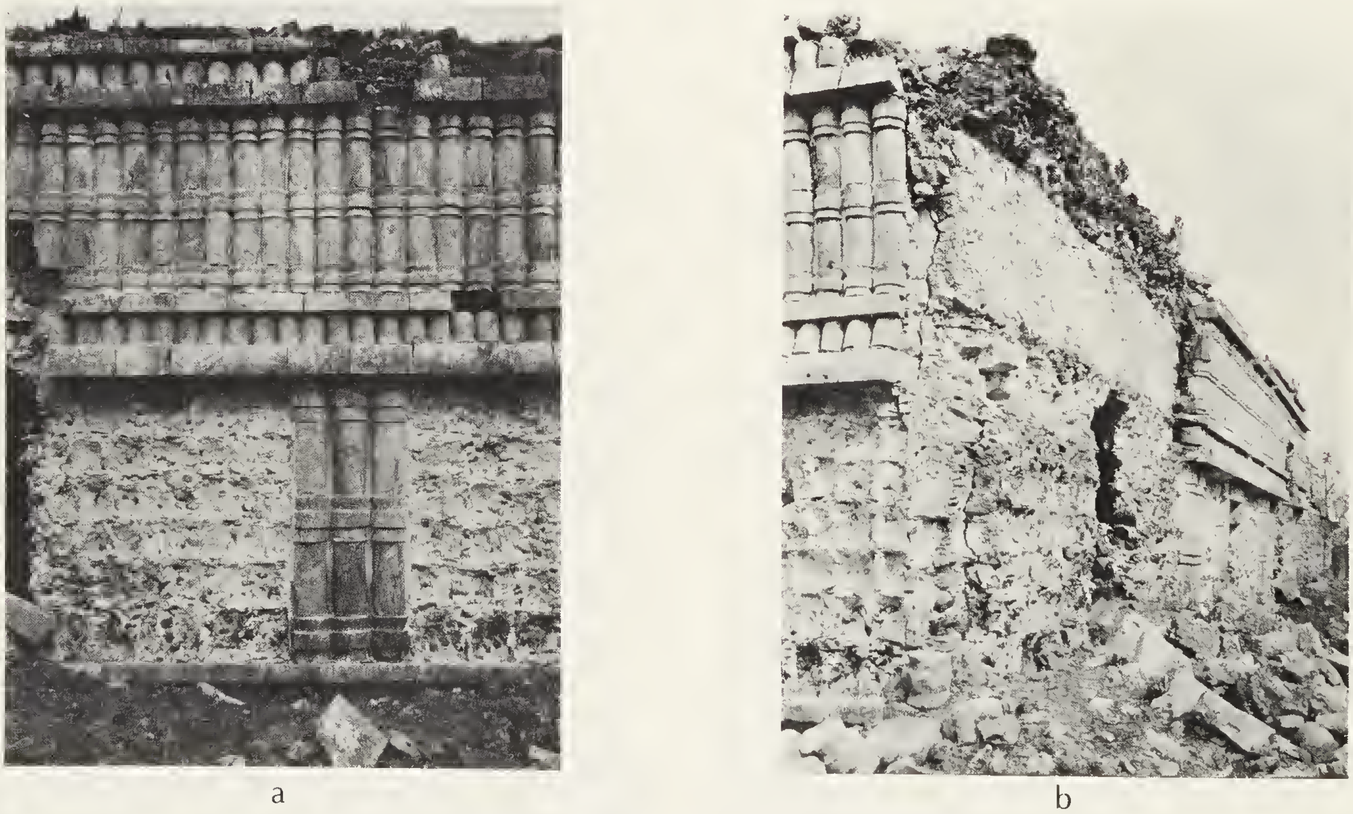


Figure 320. Kabah, Structure 1C1. Exterior views: a, detail of west facade, looking east, and showing moldings and facade decoration; b, west facade and southwest corner of building, looking north-northeast, and showing lower walls stripped of facing stone, upper facade decoration, and rough, plastered surface behind facade masonry.

allowed to set until mortar gained strength. Next, vault constructed with roughly plastered outer surface (fig. 320b), in this case exceptionally steep. In Structure 1C1 entire medial molding seems to be part of this second phase (fig. 317) rather than more common practice of only lowest member of molding being set at this time. Lastly, upper facade and roof cap were built.

Structures 1C2, 3

See East Group, Structures 2C1–6.

WEST GROUP OR QUADRANGLE
(Structures 1A7, 8, 2A1–3)

Hilltop group located just south of the Northwest Group (Strs. 1A1, 2) and on the same ridge that borders the western edge of the site (fig. 281). Orientation of West Group much the same as that of Northwest Group, but it does not seem to face any structure or group of structures of particular importance. Main approach to group less obvious than that to Northwest Group. My notes indicate the possibility of a stairway at the eastern edge of the great terrace that supports the primary structures (2A1–3) in group, and if such did exist, main approach clearly was from east.

I have no notes on the substructural terracing here. Elevation rises to the west, the platform supporting Structure 1A7 being the highest part of the group, some 2–3 m above the court of Structures 2A1–3. There are at least five chultuns in the group, possibly six, and undoubtedly a number of these reservoirs not observed by us.

The little three-room building on a small elevated platform 80–100 m 'north of Structure 2A1 (see fig. 281) is apparently the same type of structure as that so well exemplified by Structures 1A7 and 8 (see below). The long low platform that forms the west side of the court between the small three-room building just mentioned and Structure 1A8 was probably the foundation for houses of perishable materials, and the little mound immediately north of Structure 2A1 (fig. 322) also presumably represents the remains of a structure built partly of perishable materials.

Only one altar, Altar 11, was found in this group (see Monuments, p. 203) although one would expect more, particularly on or near the small ceremonial platform in the court of Structures 2A1–3.

Structures 1A7, 8

These buildings (fig. 281) now consist of light masonry walls outlining rooms that rest on a low platform or plinth .20–.30 m high. The walls stand only one or two courses in height, and, judging from the small amount of debris, were never much higher. The walls of Structure 1A7 run .45–.50 m thick, those of Structure 1A8 are .40 m (fig. 321). Presumably these low masonry walls served as a base for walls and roof of perishable materials, very possibly the pole-wall and thatch-roof construction of present-day peasant houses. The walls might have been finished by plastering with lime or mud mortar. There is good reason to believe that Structures 1A7 and 8 were dwellings.

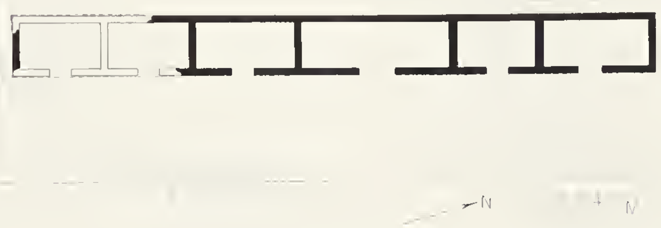


Figure 321. Kabah. Plan of Structure 1A8.

Court of Structure 2A1

PLAN

See figure 322. In his plan and description of the Cuadrangulo del Oeste, Marquina (1928, pp. 67–68; 1951, p. 762) has mistakenly reversed the orientation of this court, placing the major building, which he calls Edificio Oriente, on the east side rather than on the west where it in fact is.

CONSTRUCTION

See West Group, above.

The character and function of the long low structure on the eastern side of the court is unknown. Its debris stands to a height of about .75 m. The square platform just west of that structure and on the east-west axis of the court now stands about .80 m high with a depression in the center as though some one had excavated. The structure is best interpreted as a ceremonial platform or masonry altar.

STRUCTURE 2A1
(Structure 16)

A two-story building looking east over the principal courtyard, Structure 2A1 is the most imposing structure in the group. I have no notes on the second-story substructural platform or on the area of presumably solid fill beneath it (figs. 322, 323). So far as I could see without excavation, the whole first story behind the eastern range of rooms (Rooms 1–7) was solid fill, except for the two rooms at the north (Rooms 8, 9) and one or two rooms at the south (Room 10) shown on the plan. There could, of course, be buried rooms that were filled secondarily.

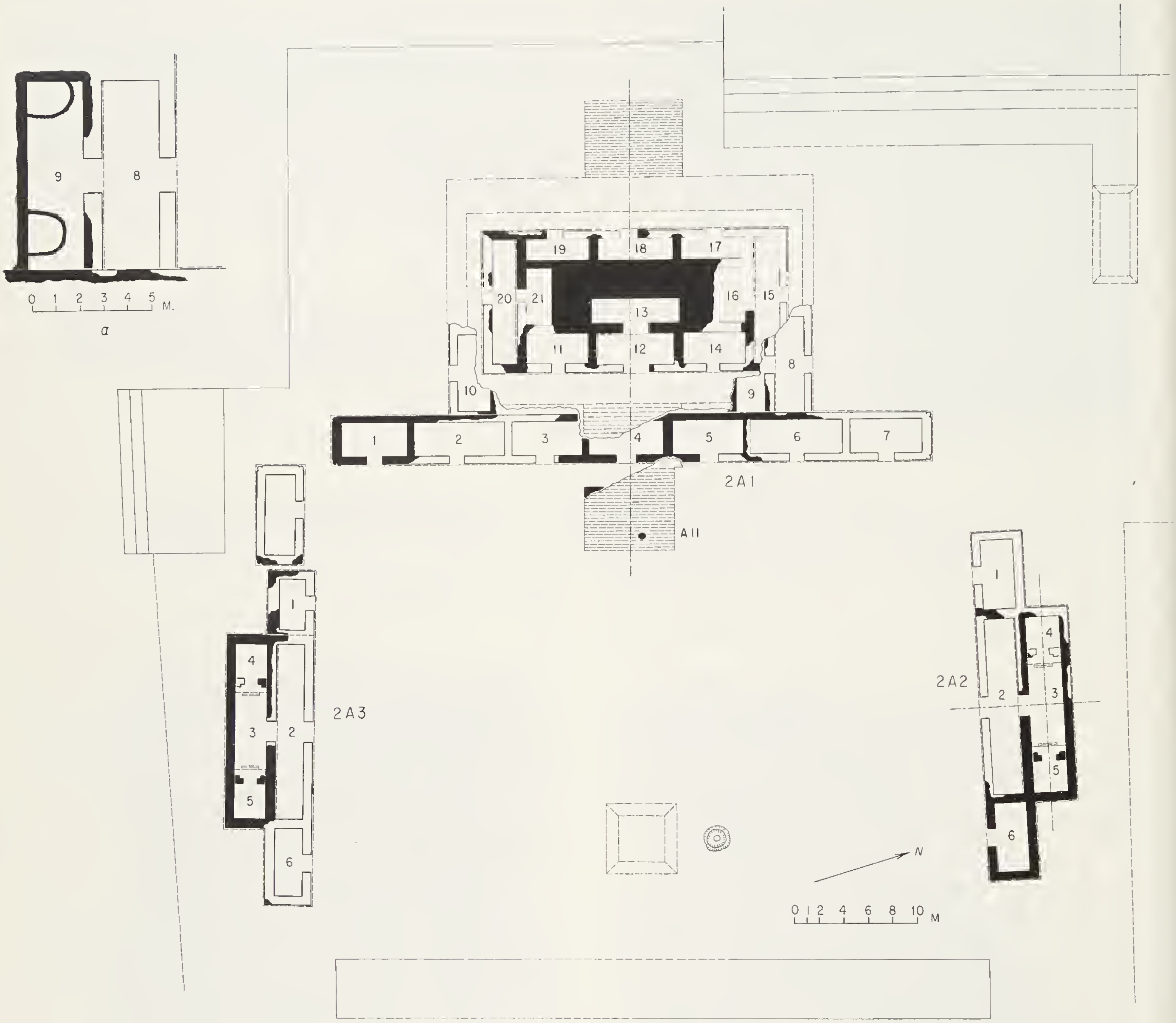


Figure 322. Kabah, Court of Structure 2A1. Plan of court and bordering structures: a, detail of plan of Rooms 8 and 9 in Structure 2A1.

SUPERSTRUCTURE

Plan. See figure 322.

Section. See figure 323.

Base Molding. Uncovered only in passage beneath east stairway. Three-member molding with colonnettes in groups of three, alternating with plain zones in middle member (figs. 323, 326).

Stairways. No part of upper flight of stairs at east visible, but some such stairway must have been present to reach upper story of building. No good measure on treads and risers of any stairway. West stairway built of cut and shaped but undressed stone (fig. 324a).

Floors. Very little showing. Usual buff color.

Walls. Outer and transverse inner walls of first story run about .70 m thick. Rather light for transverse walls. Walls of second story about the same, except for medial wall between Rooms 12 and 13 which is .88 m thick at jambs.

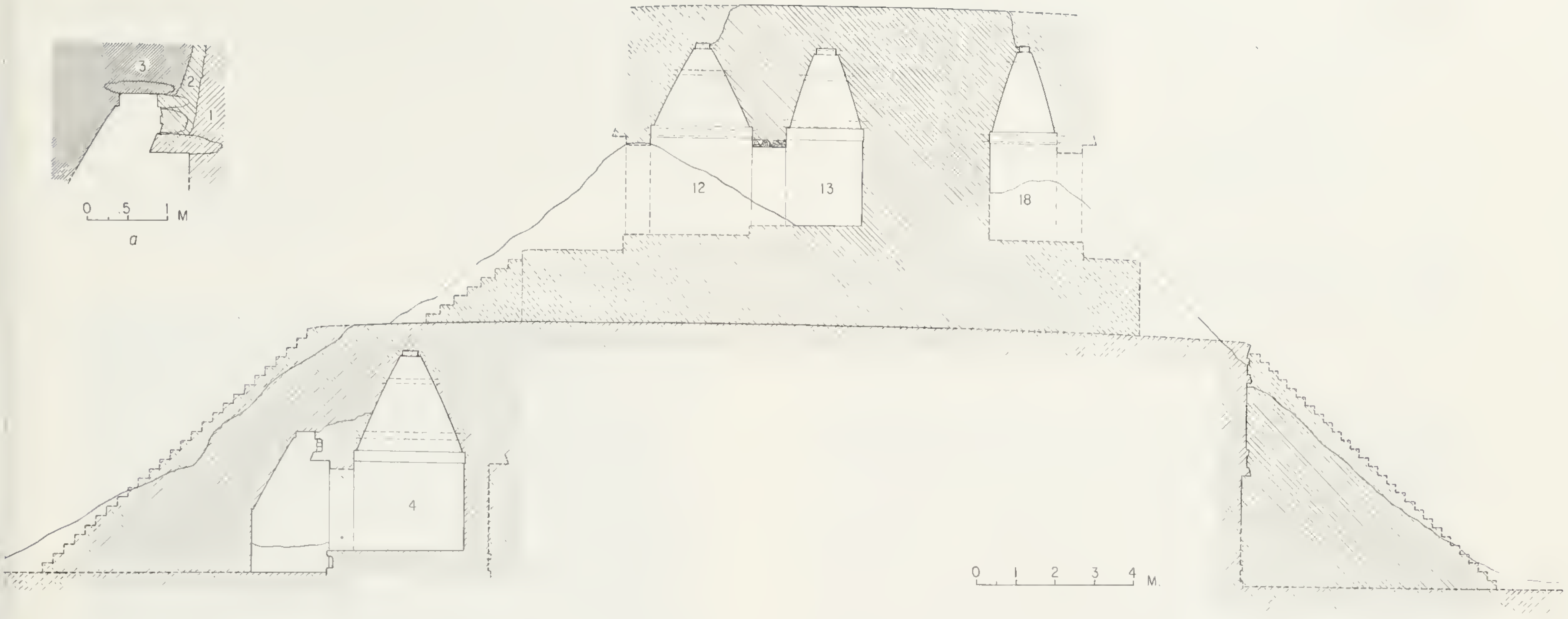


Figure 323. Kabah, Structure 2A1. East-west section (see fig. 322): a, detail of section of half-vault beneath east stairway, showing phases of construction.

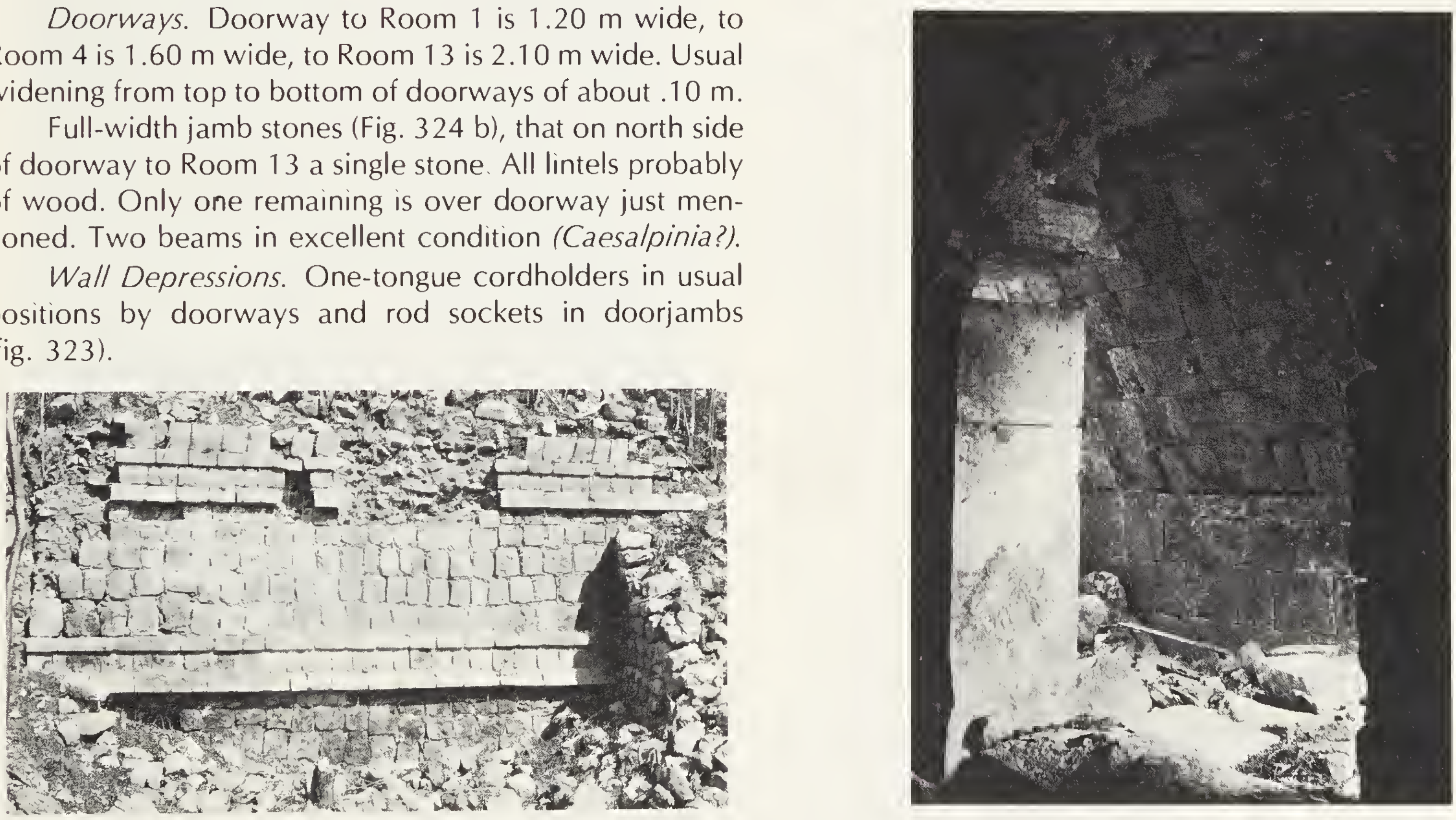
Outer wall stone of first-story east range (Rooms 1–7) extremely well cut and faced. Wall stone at west less fine (fig. 324a). Inner wall facing rather crude, except facing on rear wall of Room 12, where stone is of outer quality and rather large, up to .50 × .60 m. Usual slightly inset course beneath spring of vault.

Doorways. Doorway to Room 1 is 1.20 m wide, to Room 4 is 1.60 m wide, to Room 13 is 2.10 m wide. Usual widening from top to bottom of doorways of about .10 m.

Full-width jamb stones (Fig. 324 b), that on north side of doorway to Room 13 a single stone. All lintels probably of wood. Only one remaining is over doorway just mentioned. Two beams in excellent condition *(Caesalpinia?).*

Wall Depressions. One-tongue cordholders in usual positions by doorways and rod sockets in doorjambs (fig. 323).

Vaults and Beams. High steeply-pitched vaults (fig. 323). Normal relation of height of spring of vault to level of first course of medial molding. Vault stone more specialized than usual in Puuc (fig. 325).


a

b

Figure 324. Kabah, Structure 2A1, lower story: a, west facade north of stairway, looking east, and showing medial and cornice moldings and remains of north wall of staircase; b, north jamb of doorway of Room 4, looking northeast into vaulted passage under east stairway.

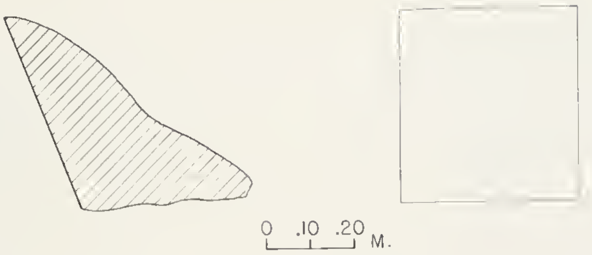


Figure 325. Kabah, Structure 2A1. Section and face of typical vault stone.

Beams in each vault (fig. 323): four in small offset under capstones, three, one or two courses lower, two below spring, at spring, or in course above spring.

Moldings. Three-member medial molding with spool elements in middle member and guilloche pattern on upper member on east range of lower story (figs. 323, 326, 327). Similar medial molding but without spools or guilloche on west facade (fig. 324a). Cornice molding of four members with colonnettes in second member on east range. Similar cornice molding but without colonnettes on west facade. No moldings remaining on second story.

Roof. Old roof of first story clearly seen in masonry above capstones and beneath fill of second-story platform. Roof cap .10–.15 m thick of usual small-stone and mortar construction, quite similar to floors of courts and buildings, and with smooth plaster upper surface.

Decoration (see Hissink 1934, pp. 47, 102). Engaged columns with rounded capitals and bases at corners of east range of first story (figs. 326, 327b) only decoration noted in lower wall zone.

Upper facade of east range seems to have had masks at front corners, flanked by split columns with spools and lattice decoration, at least at ends of building and very possibly at front and rear (figs. 326, 327).

Great deal of fallen decoration from second story. Seems to have been large string course (medial molding?) with geometric design, judging from number of these

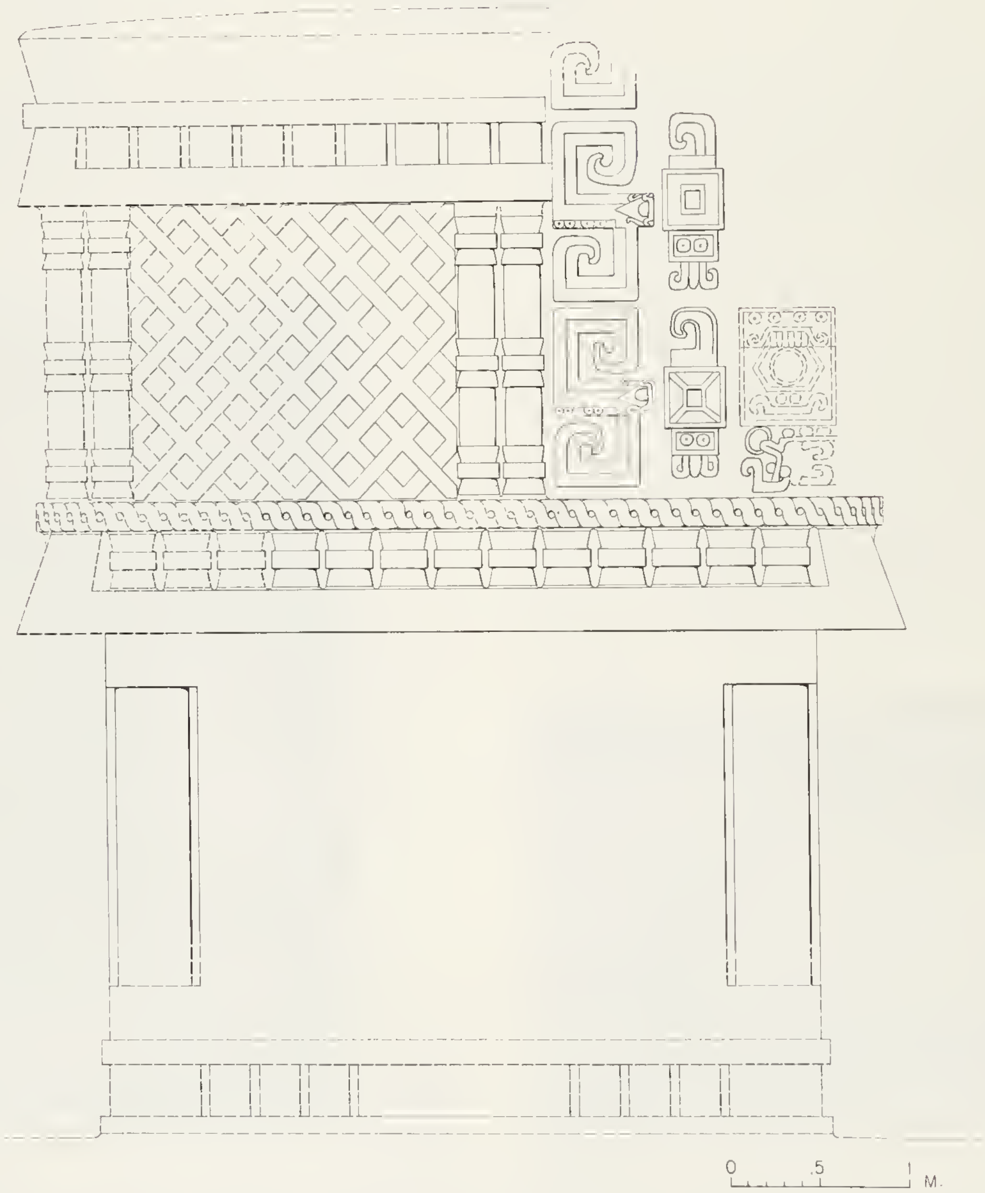
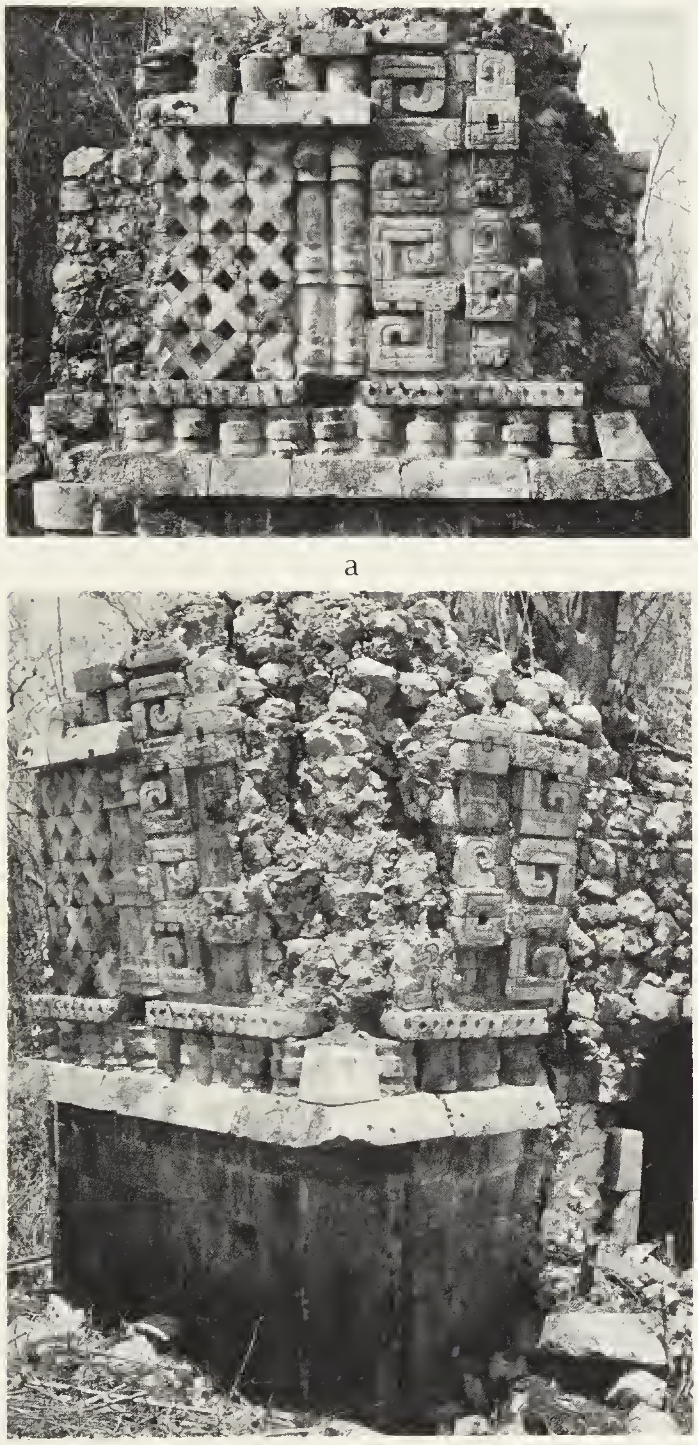


Figure 326. Kabah, Structure 2A1, first story, east range. Partly restored elevation of south facade (Room 1).

pieces in the fall. Also mask elements. Many pieces from what seems to have been sculptured panel with human figures, scrolls, and guilloche design (fig. 328a).

Prints of red hands (see pp. 76, 143, 555) and other designs in paint on vault face of Room 9 (fig. 328b). In same room are following signatures in pencil:

Teoberto Maler	Aymé
Febrero 1887	June 22, 18[82]


a

b

Figure 327. Kabah, Structure 2A1, first story, east range: a, upper zone of south facade (Room 1), looking north, and showing remains of medial and cornice moldings, frieze, and remnants of corner mask; b, southeast corner (Room 1), looking northwest, and showing engaged column at corner, moldings, and remnants of corner mask.

Aymé was the United States consul in Yucatan at that time. He accompanied Desiré Charnay on many of his travels in the peninsula.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

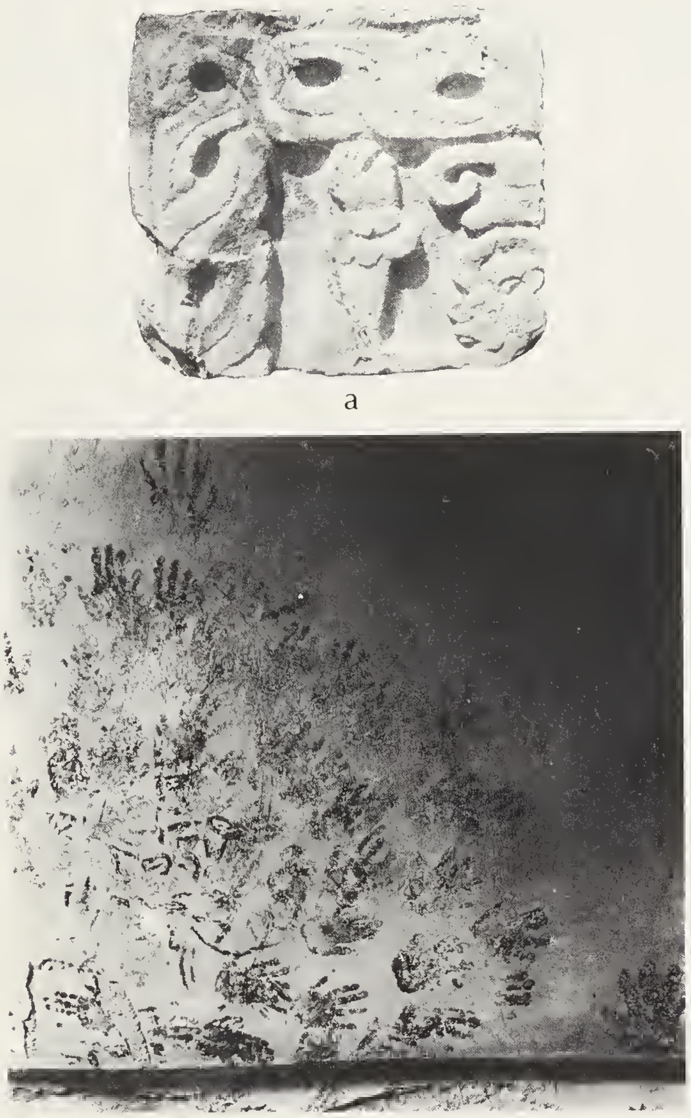
Eastern range of rooms (Rooms 1–7) seems to have been first unit built. This is shown by fact that walls of Rooms 8–10 are secondary to west wall of east range and because first member of medial molding on east range is buried by later construction at west. No old exterior facade above molding; may have been either torn out or never built.

Remainder of first story, i.e., Rooms 8–10 and north, south, and west facades, seemingly forms second unit. First and second units could have been an almost continuous operation.

Stairways and second story comprise third unit. West stairway overlays facade and is clearly secondary to it. Masonry of east stairway appears superficially to tie into hearting above medial molding of east range. Close examination reveals cleavages and differences in color of mortar that indicate three steps in construction (fig. 323a): (1) vault masonry of east range with rough surface rising from top of first member of medial molding; (2) second and third members of molding and nearly vertical stratum of mortar above; (3) masonry of stairway. Second step in this sequence would normally involve construction of upper facade of building. Best interpretation of what happened here is that upper facade had indeed been built and was torn out to join staircase to building. Cannot be certain of this, but finished roof surface over first story tends to confirm interpretation involving tearing down of old upper facade.

Two hollow, rounded secondary constructions (fig. 322a) in Room 9. Walls built of wall and vault stone, with dressed faces forming inner wall surfaces. Stone set in mud mortar. Debris outside these enclosures prevented seeing thickness of walls or whether they had outer facing. No entrance into west enclosure, other than through top, and probably none into east. Walls of east enclosure now stand to within .90 m of spring of vault, walls of west to within .57 m.

Stephens (1843, 1:411) observed these enclosures on his visit to the ruins in 1842, when there seems to have been considerably less debris in the room. His description suggests a bench or altar, "a raised platform about four feet high," upon which the rounded constructions stood. The purpose of the enclosures or their time of construction can only be surmised. They might be for the storage of maize or other crops (see Puleston 1971, pp. 324, 332–333; Tozzer 1941, p. 60, footnote 287). Local farmers use the ancient buildings to this day for temporary living quarters. The reused wall and vault stone in the walls of the enclosures suggests construction after Structure 2A1 or nearby



a

b

Figure 328. Kabah, Structure 2A1: a, carved stone fallen from second story; b, designs in red paint on vault soffit in Room 9.

buildings had started to distintegrate, and the use of mud mortar would also seem to represent a time after the principal occupation of the city.

STRUCTURE 2A2

SUPERSTRUCTURE

Plan. See figure 322.

Sections. See figure 329.

Base Molding. Simple course of dressed stone (fig. 329).

Stairways. Small stairways in Room 3 that lead to elevated floor level in Rooms 4 and 5 (see figs. 322, 329, 330).

Floors. The arrangement of floors shown in the sections (fig. 329) is largely restoration. Only the two top floors in Room 3 and the floor in Room 5 were observed. The floor in Room 2 can be assumed with high degree of probability, but the lowest floor in Room 3 and the height of the step or steps from Room 2 to Room 3 are shown only as possibilities. Wherever observed, floors are of usual buff color.

Walls. Outer walls .68–.70 m thick, medial wall about .85 m. Quality of stone work average. Rear wall of Room 2 faced with stone of quality used on outer wall surfaces. Inset course below vault spring not clearly marked.

Doorways. Lintel of doorway to Room 6 of stone. Lintels of central doorways may have been of either stone or wood. Note that southern face of lintel over doorway to Room 3 apparently formed spring of vault (fig. 329a), an unusual practice. Full-width jamb stones.

Doorways to Rooms 4 and 5 most unusual in design (figs. 322, 329; and see fig. 332). Wooden lintels still standing in doorway to Room 5 (fig. 330). Identified by our native laborers as chacte viga *(Caesalpinia?).*

Wall Depressions. Rod sockets .055 m in diameter by .035 m deep in jambs of inner central doorway. No other wall depressions observable.

Benches. Raised floor at each end of what originally was a single rear room may have been designed as benches (figs. 322, 329b). Molding across exposed faces suggests this.

Vaults and Beams. Normal except for relationship of height of spring of vault to level of medial molding and for use of lintel over doorway to Room 3 to form spring (fig. 329a). Vault stone tends to be rather specialized.

Rear vault (Rooms 3–5) had extraordinary number of beams (fig. 329b).

Moldings. First course of medial molding, an apron member, all that remains in place.

Decoration. Fallen mask elements from southeast corner of building and in debris across front. Other elements that may or may not have been combined with masks. Fair number of X elements from lattice design and a few split columns.

Stucco decoration over doorway to Room 5 (fig. 331) in much the same condition as when seen by Stephens (1843, 1:409–410). Green color now visible seems to be mold, but ample traces of red paint in center lines of feathers and on border of central disklike ornament. Stone tenon at center of disk presumably supported other stucco ornamentation that is now fallen.

At each side of stucco decoration, on walls of Room 3, just below spring of vault, are traces of painting in red, now faded to salmon pink. Painting at north is .25 m long, that at south .21 m. May have extended above spring line, but questionable.

On north wall just below spring of vault and near painting just mentioned is barely legible signature, Aymé, with date below. Only 82, undoubtedly 1882, can be made out (see Str. 2A1, p. 167).

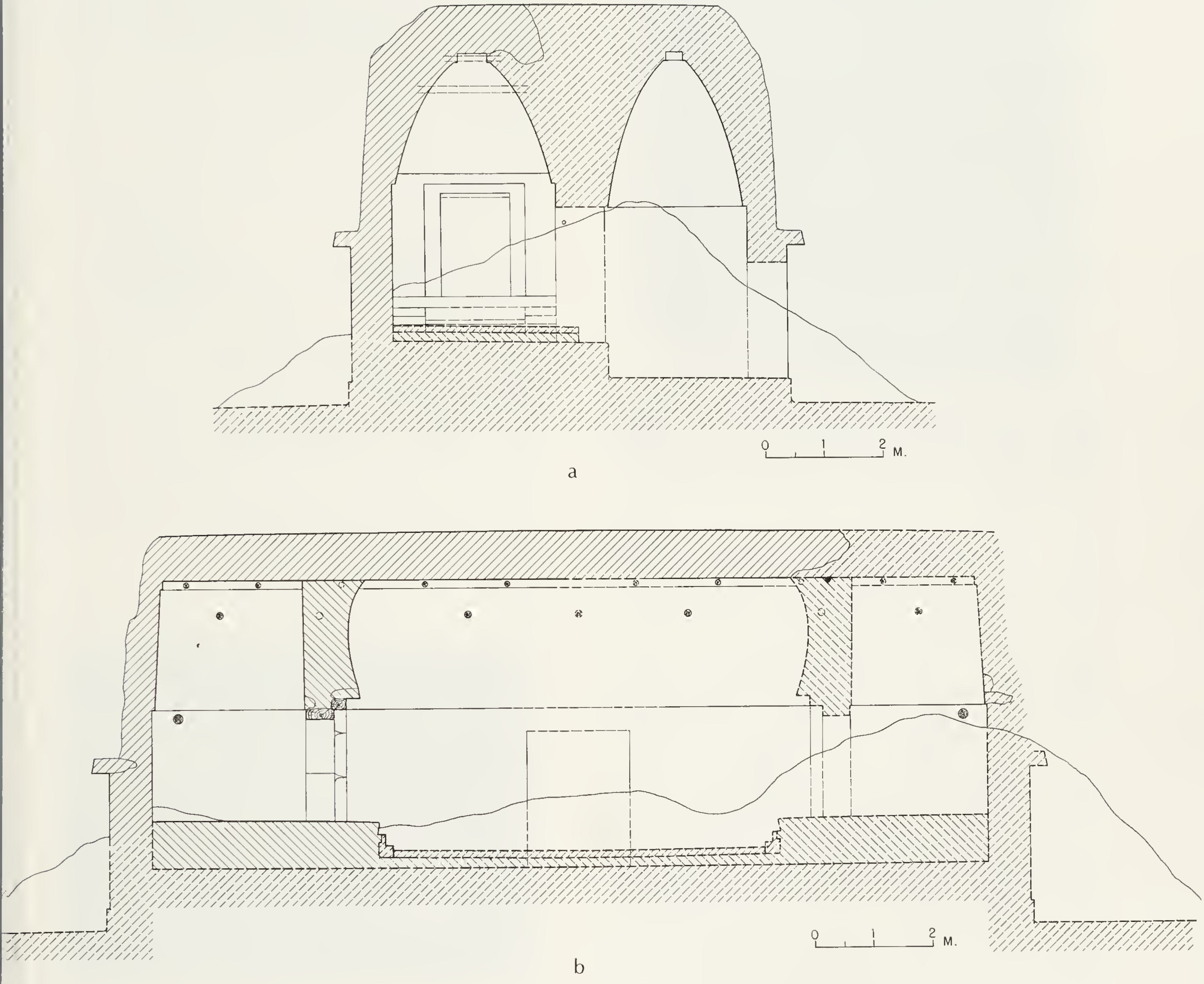


Figure 329. Kabah, Structure 2A2: a, north-south section through Rooms 2 and 3; b, east-west section through Rooms 3–5 (see fig. 322).

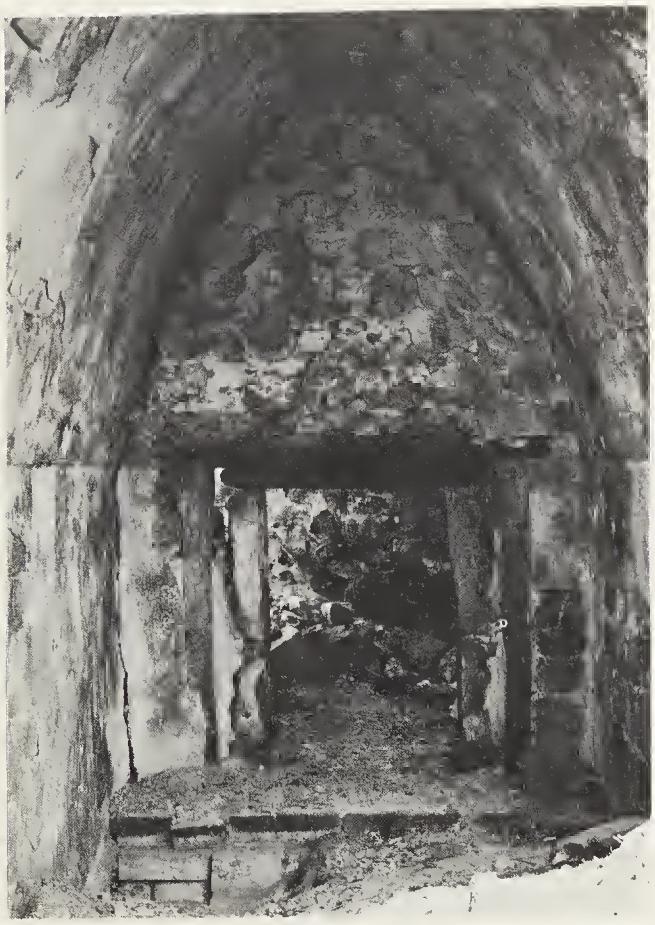


Figure 330. Kabah, Structure 2A2. East end of Room 3 and doorway to Room 5, looking east, and showing remains of stairway to Room 5 and stucco decoration over doorway (see fig. 331).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Plan drawn in field for map (Shook and Trik) shows Rooms 1 and 6 built secondarily to rest of building. My notes make no mention of this and it is open to question.

Transverse walls with doorways to Rooms 4 and 5 are definitely later than walls they abut. Benches that serve as floors in end rooms probably secondary to main structure, but this not certain. Lowest floor in Room 3 and step up from Room 2 shown in sections (fig. 329) were not excavated and are hypothetical. Their existence is highly probably but the height of the step and consequent level of the floor is guesswork.

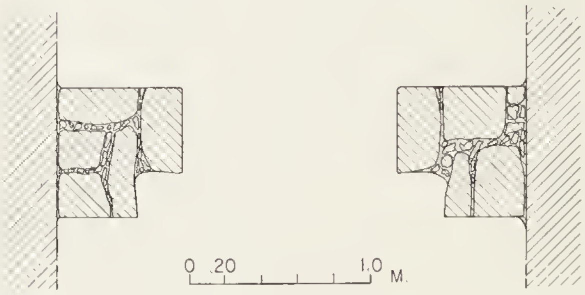
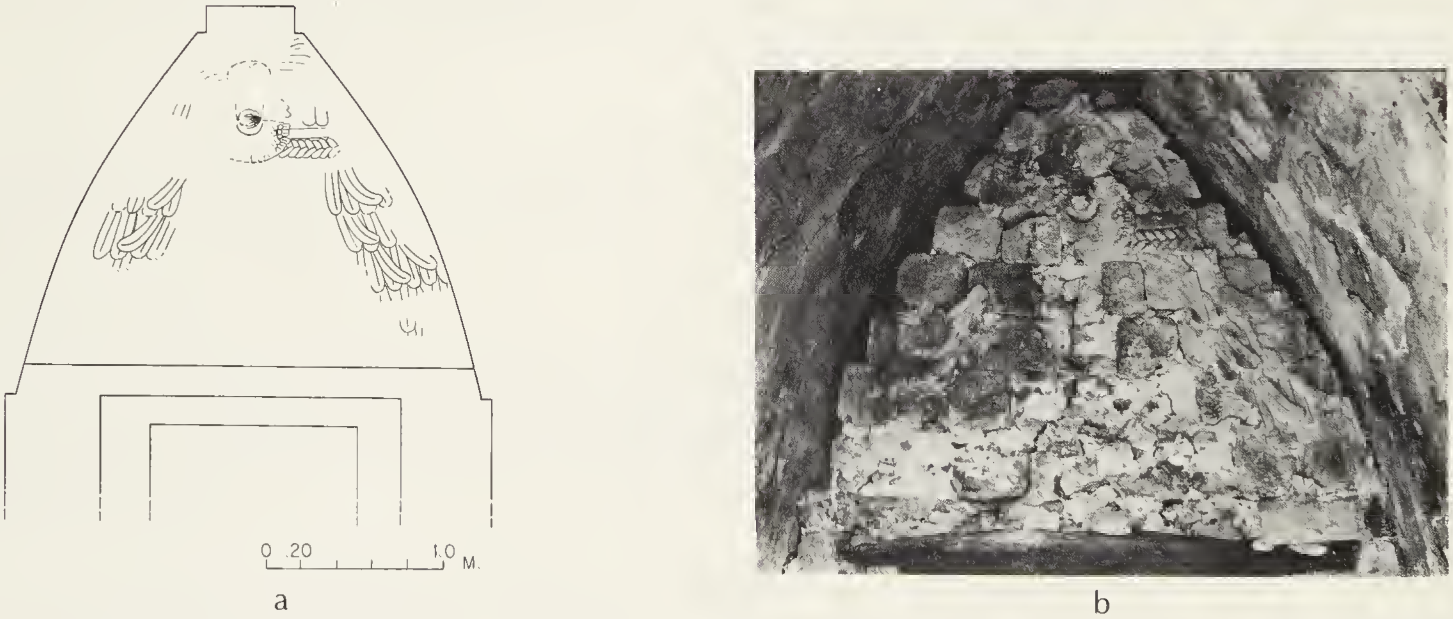


Figure 332. Kabah, Structure 2A3. Plan of doorway to Room 5 (see fig. 322).



a

b

Figure 331. Kabah, Structure 2A2. Stucco decoration at east end of Room 3: a, elevation of wall above doorway to Room 5; b, view of same wall, looking east, and showing remnants of stucco.

STRUCTURE 2A3

This is the building from which Stephens (1843, 1:411–413) removed the sculptured doorjambs that are now in the American Museum of Natural History in New York (Spinden 1920, pp. 384–389). The structure is badly fallen and few architectural details are discernible.

SUPERSTRUCTURE

Plan. See figure 322. Almost identical to that of Structure 2A2, including secondary transverse walls in rear chamber.

Doorways. Stephens's (1843, 1:411–413) description makes it fairly clear that the sculptured jambs were in the doorway leading from the front to the rear chamber (Room 3). Jambs of doorways to Rooms 4 and 5 are of same unusual design (fig. 332) as seen in Structure 2A2.

Wall Depressions. Rod sockets in sculptured jambs (figs. 333–334).

Molding. First member of medial molding, which is only remnant of molding visible, is same as on Structure 2A2 except for greater bevel.

Decoration. Only visible decoration from outside of building is one mask element and an X piece.

Sculptured doorjambs consist of two stones each with total height of 1.81 m and width of .69 m (figs. 333, 334; and see Stephens 1843, 1:412–413; Spinden 1920, p. 389). The stones have been cut down by removing material from their backs to a present thickness of .13 m. See Proskouriakoff 1950, pp. 169–170; and Tozzer 1957, 11:17–18, 177, for discussion of sculpture.

EAST OR PALACE GROUP OR QUADRANGLE

(Structures 2B1–3, 2C1–6, 1C2,3)

This is the largest and presumably the most important group of structures at Kabah (fig. 281; and see Proskouriakoff 1946, pl. 17). The buildings are also the best preserved (fig. 335). The group rests on a low natural rise where the bedrock may attain a height of something like 5 m above the valley floor. This rise in ground level runs toward the east and southeast as shown by the much lower terrace walls on those sides. The primary orientation of the assemblage is toward the west, looking over the central part of the city, and at the Northwest and West Groups on the western ridge. While the East Group may be approached from any direction, the main approach seems pretty clearly to be from the west.

PLANS AND SECTIONS

See figures 338–340.

CONSTRUCTION

The extensive artificial leveling that forms the courts and terraces and provides a general base for the structures that comprise this architectural complex is carried out by means of retaining walls that contain a loose fill of large rough unshaped stone, very likely laid down, to judge from examples observed elsewhere, in large blocks separated by rough work walls. Retaining walls, which are terraced wherever a rise of 2 m or more must be attained, are for the most part vertical but occasionally carry a slight batter. They are built of roughly shaped stones with the outer exposed ends cut to more-or-less plane surfaces (fig. 336). Stones are all sizes and shapes from about .20 m on the face up to .50 m and usually .50 m or more deep. This masonry now appears to be dry laid, but there are indications the stone once was grouted in mortar, nearly all of which has leached out. There are no remains of plaster on these wall surfaces, and I do not know whether they once were covered, but I suspect they were at least roughly plastered. Upper surface of all courts and terraces presumably carried the usual fine plaster flooring that has been found many times in sheltered places.

Of the nine or ten stairways that rise from ground level or from one terrace level to another (fig. 281), rather than forming direct approaches to specific buildings, I have notes on only two. The great flight of steps that leads from ground level to the court in front (west) of Structure 2C6 is built of rough stone about like that used in the retaining walls just mentioned. Steps average about .22 m in height. There are no indications of balustrades. The little staircase near the northwest corner of the court south of Structure 2C3 is constructed in the same fashion and with risers of about the same height. It may be noted that two stairways, the one immediately west of Structure 2C1 and a tiny flight near the northeast corner of the group, are part or wholly inset rather than of the more usual design of a projecting staircase.

Fourteen chultuns, some nearly intact, others in various stages of disintegration, were observed and are shown on the map (fig. 281). The chultun immediately south of Structure 2B2 had been repaired and was serving as a water cistern in 1935. A stone ring (fig. 337) that seems to have formed the orifice of a chultun was found in this court. It may have come from the one just mentioned or from one mentioned by Charnay (1887a, p. 381), but not seen by us, north of Structure 2B2. In the court south of Structure 2C3 the circular drainage platform of one chultun is sufficiently preserved to plot it on the map. There are undoubtedly other examples of these ancient cisterns buried beneath these courts and terraces and not observed by us.

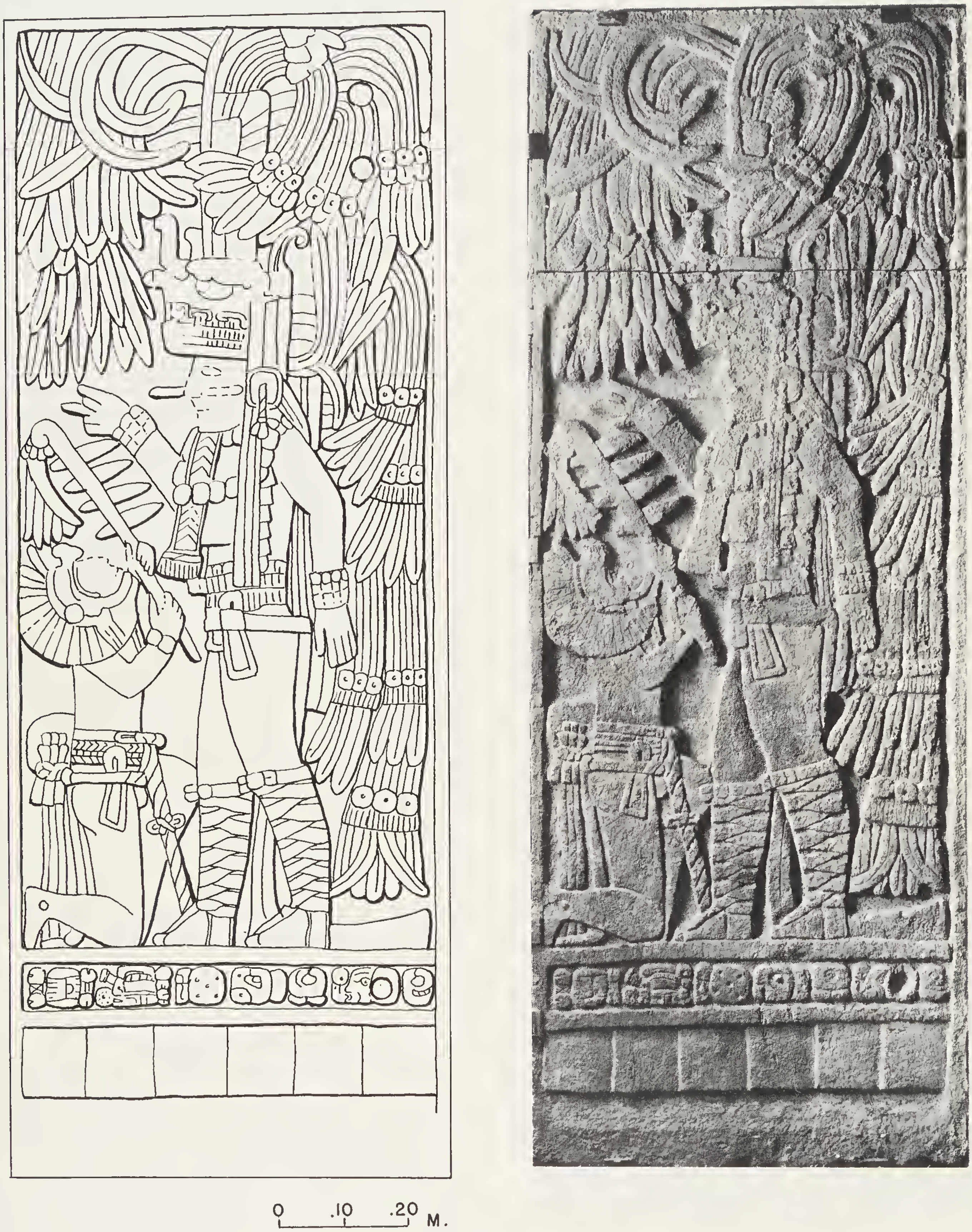


Figure 333. Kabah, Structure 2A3. Sculptured doorjamb, presumably from entrance to Room 3. This was probably the east jamb. Note rod sockets in plumes at upper right of picture and in glyphic band at lower right. Photo, courtesy American Museum of Natural History, New York.

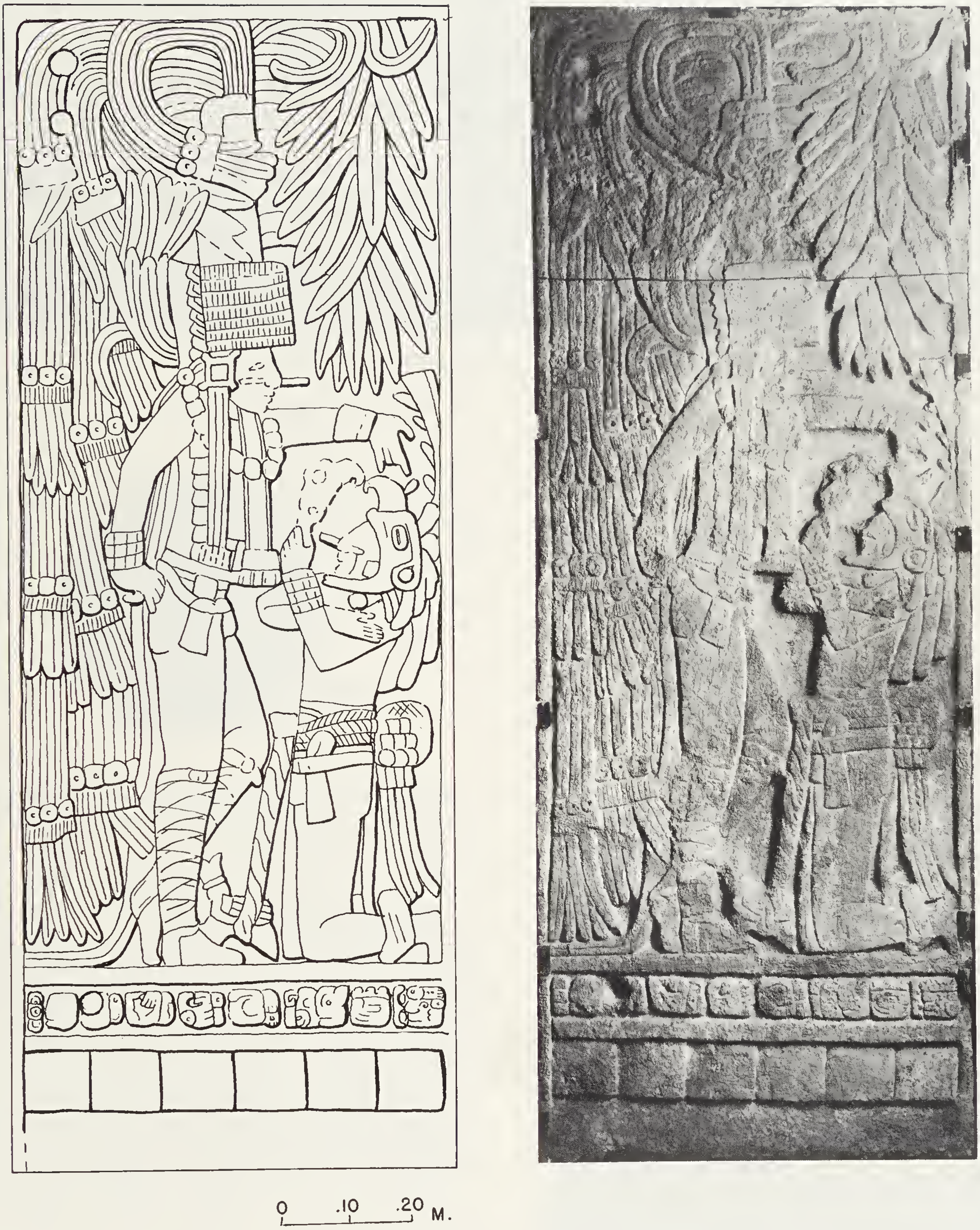


Figure 334. Kabah, Structure 2A3. Sculptured doorjamb, presumably from entrance to Room 3. This was probably the west jamb. Note rod sockets in plumes at upper left of picture and in glyphic band at lower left. Photo, courtesy American Museum of Natural History, New York.

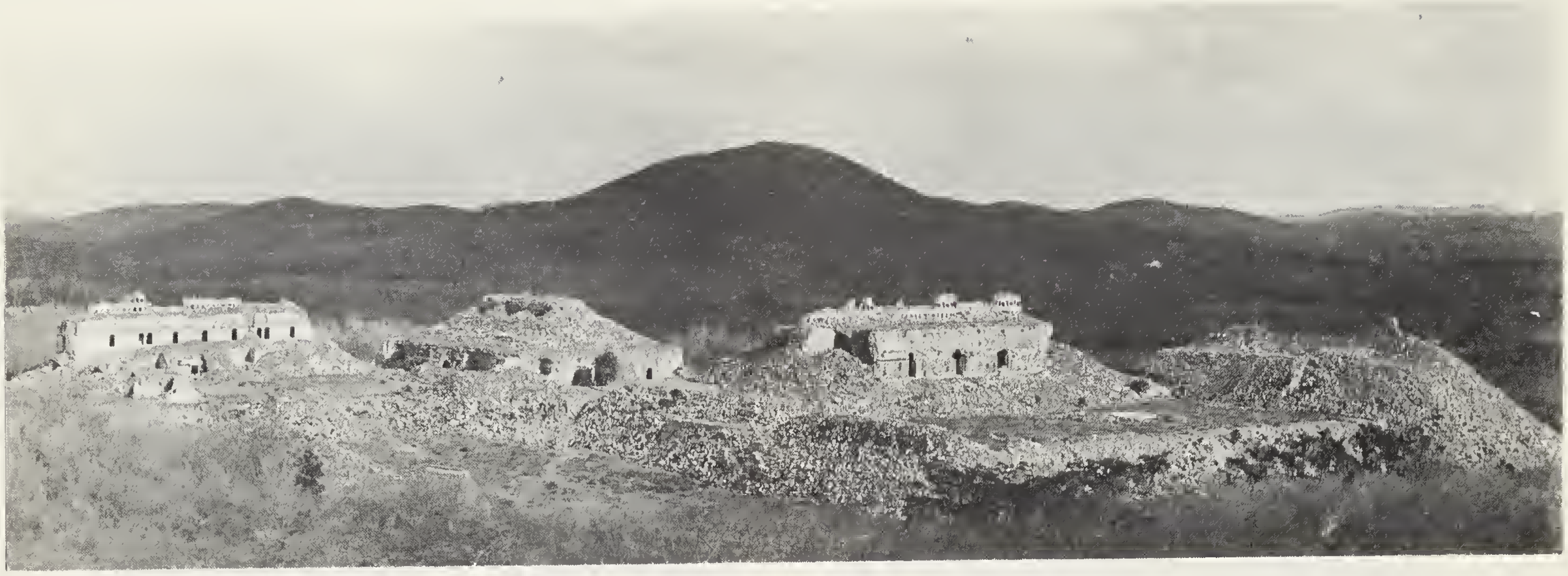


Figure 335. Kabah, East Group, looking southeast and showing (left to right) Structures 2C2, 2C3, 2C6, and 2B3.

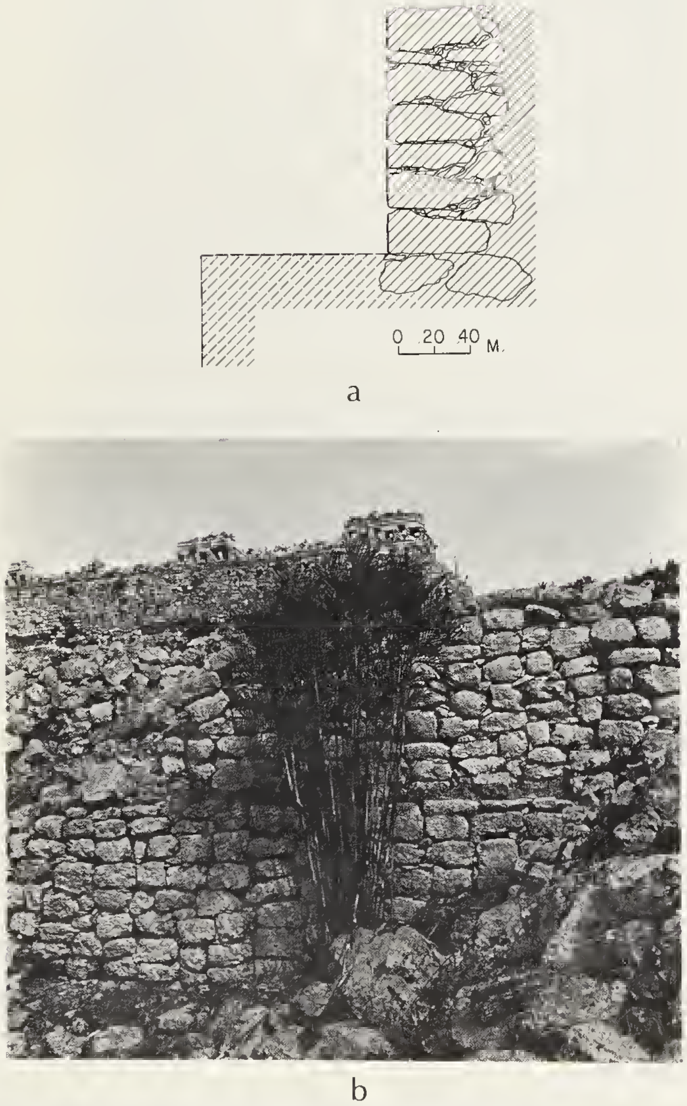


Figure 336. Kabah, East Group. Terrace walls: a, section showing typical masonry of retaining wall; b, view of west terraces of substructure of Structure 2C6 near southwest corner, looking east.

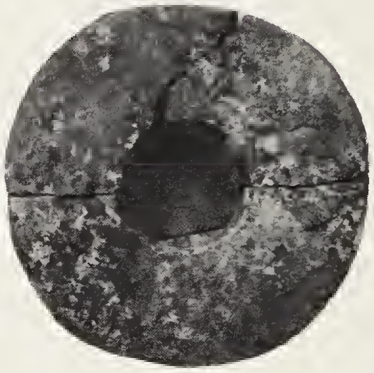


Figure 337. Kabah, East Group. Stone ring, apparently from mouth of chultun, found in court before Structure 2C6.

Along the northern, and to a lesser extent the eastern, border of the group are found the remains of a good number of low platforms and of buildings with low masonry walls that seem to have been dwellings or other domestic structures (fig. 281; and see Ruppert and Smith 1957, p. 583). Possibly associated with these domestic buildings, possibly not, are the underground chambers, Structures 1C2 and 3, that apparently are tombs. We carried on no excavations in these chambers, but some years later Dr. Alberto Ruz (1948, pp. 5–21; 1953, pp. 331–332; 1961) thoroughly examined similar, nearby underground rooms and confirmed our suspicions that they were indeed tombs. Their design and structural details are well illustrated by Ruz.

As might be expected at so important an assemblage of buildings, six altars, A14–18 and one unnumbered example, were found here (see Monuments, below). Several of these altars are probably some distance from their original locations.

Structures 2B1–3

I have little information on these three buildings. Structure 2B1 consists of a low masonry wall .60 m thick that borders a low bench .86–1.10 m wide (fig. 338). There is little fallen debris in or around the building and presumably the upper walls and roof were of perishable materials. The function of the structure can only be guessed at.

Structure 2B2, a type of construction that has been referred to as an altar or ceremonial platform, is primarily of interest in that the walls are made of stones with hieroglyphs carved on them in low relief. The structure is in very bad condition. When he visited the site over a century ago, Stephens (1843, 1:387) described the building as an "enclosure," which suggests that the platform had even then been hollowed out by digging, presumably by treasure hunters. Stephens (ibid., p. 338) also notes that the stones with hieroglyphs "lay scattered about," a condition that has not improved with the passage of time and the curiosity of numerous visitors to the ruins. Since my work at Kabah, the platform has been repaired and partly reconstructed (Moedano 1952; and see Tozzer 1957, 11:81).

Structure 2B3, which rests on the highest substructure in the group and was apparently a building of considerable importance, is so badly fallen as to offer few details of interest without excavation. I have no notes on the architecture. As may be seen from the plan (fig. 338), the two eastern rooms and the extreme western room seem to be secondary to the central part of the building.

Structures 2C1, 4, 5

I have no notes on these buildings. All are badly fallen and offer few visible architectural detail. Structure 2C1 shows an interesting plan (fig. 339), and it is regrettable more is not known about the building. Several phases of construction seem to be represented. The juncture at the southeast corner of Structure 2C4 with Structure 2C3 shows that 2C4 was built later than 2C3. Structure 2C4 seems to be the building that Stephens (1843, 1:395) says was called "the cocina, or kitchen" by the natives. At the time of my work at the ruins Structure 2C5 was no more than a mound of debris sufficiently high to assure that the building had been vaulted (fig. 338). Since then the structure has been excavated and partially reconstructed by the Instituto Nacional de Antropologia e Historia. There is a three-member base molding, the middle member formed of colonnettes.

Structure 2C2

(Second Casa, Palace, Second Palace, Fourth Palace, Structure 2)

The easternmost of the three major structures in this group, Structure 2C2, is a badly fallen two-story building of which only the western facade of the second story remains anywhere near intact (fig. 341). The building, which rests at the level of the court of Structures 2C1–4, is almost symmetrical in plan and seems to face in two directions, to the east on a great terrace from which rises a fine broad stairway, to the west on the court of Structures 2C1–4 with its small ceremonial platform and altar at the center (fig. 281).

PLAN, SECTIONS, AND ELEVATION

See figures 339, 340a, 342; and see Proskouriakoff 1946 (pl. 17).

SUBSTRUCTURE

Stairway. Broad stairway of four or five steps leading from eastern terrace to Structure 2C2 and court of Structures 2C1–4. Risers are .25 m and treads seem to run from about .70 to over 1 m.

Construction. See East Group, above.

The central fill that supports the second story is of loose stone, dry laid, that is retained by the heavy rear walls of the first-story rooms, which are made of a tight fill of stone grouted in mortar (figs. 342, 344).

SUPERSTRUCTURE

Plan. See figure 339.

Sections. See figures 340a, 342.

Elevation. See Proskouriakoff 1946 (pl. 17, called Str. 2).

Base Molding. First story carries typical three-member molding with colonnettes in middle member (fig. 348). Single course of slightly projecting stones forms base molding on second story (figs. 342d, 349).

Stairways. Stairs to second story at east and west rise over passageways spanned by half-vaults (fig. 342). Capstones of half-vault under eastern stairway rest on first course of battered upper facade zone; capstones of half-vault under western stairway at same level, but rest on vault stones in place of apron-beveled stones of upper facade (fig. 343). No steps visible in either stairway, but fallen stones at east .28 m high and at west .27 m high, so risers must have been about .25–.26 m.

Floors. None showing in first story except in passage under west stairway. Two floors there, the later .05 m above the earlier, both buff colored. Usual buff floor in second-story rooms that appears to have been painted black, now faded to dark blue or slate, but color may come from mold. Excellent illustration here of standard floor construction with fine polished plaster top layer overlying rough floor (fig. 344). Buff coloring in floors probably incorporated in final coat of plaster.

Floor of Room 30 raised .13 m above usual level of top of base molding by course of stone just inside doorjambs.

Walls. Usual practice of outer wall surfaces employing better cut and dressed stone than inner wall surfaces (figs. 346b, 349). Also usual design of walls narrowing at

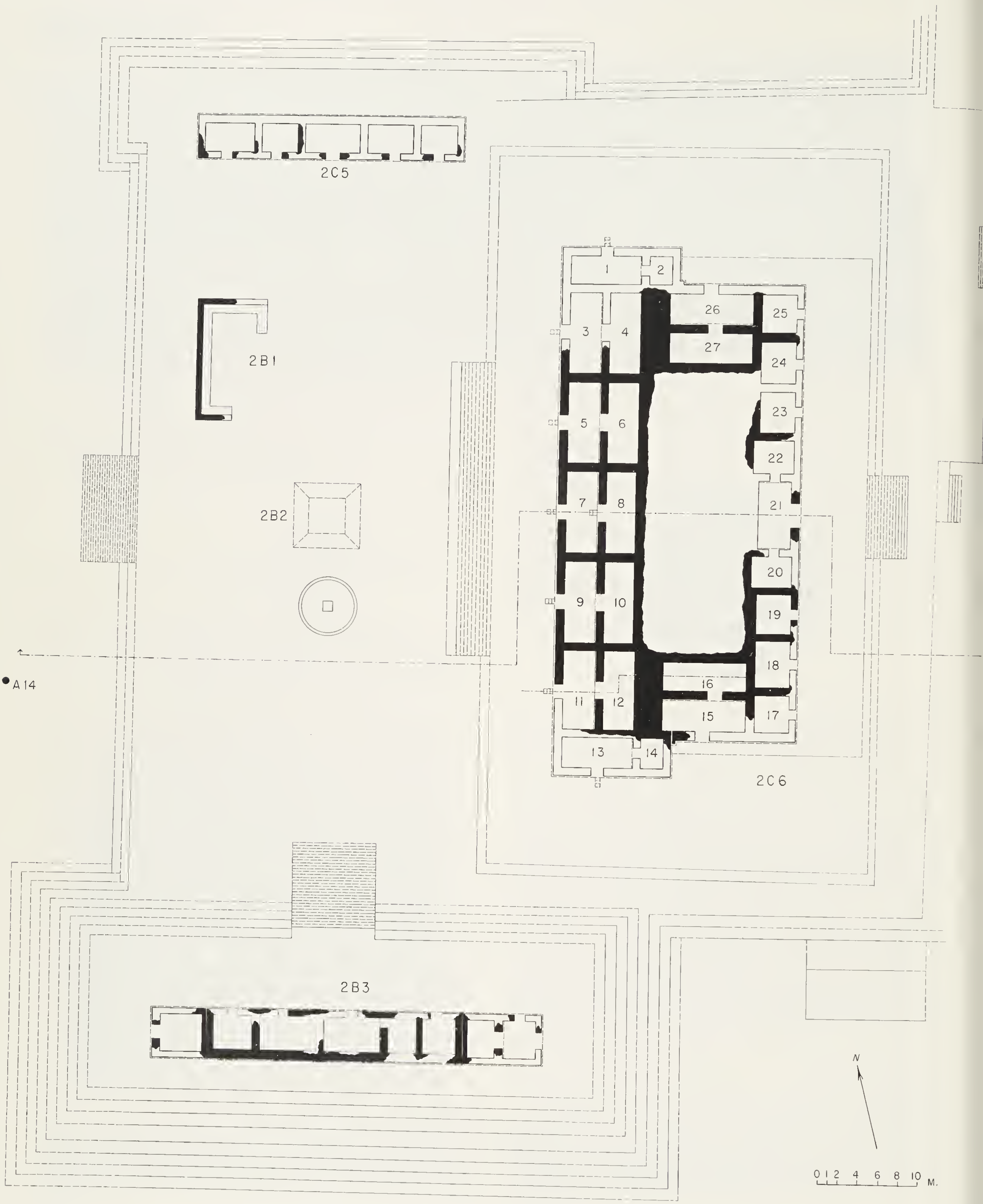


Figure 338. Kabah, East Group. Plan of Structures 2B1–3 and 2C5, 6.

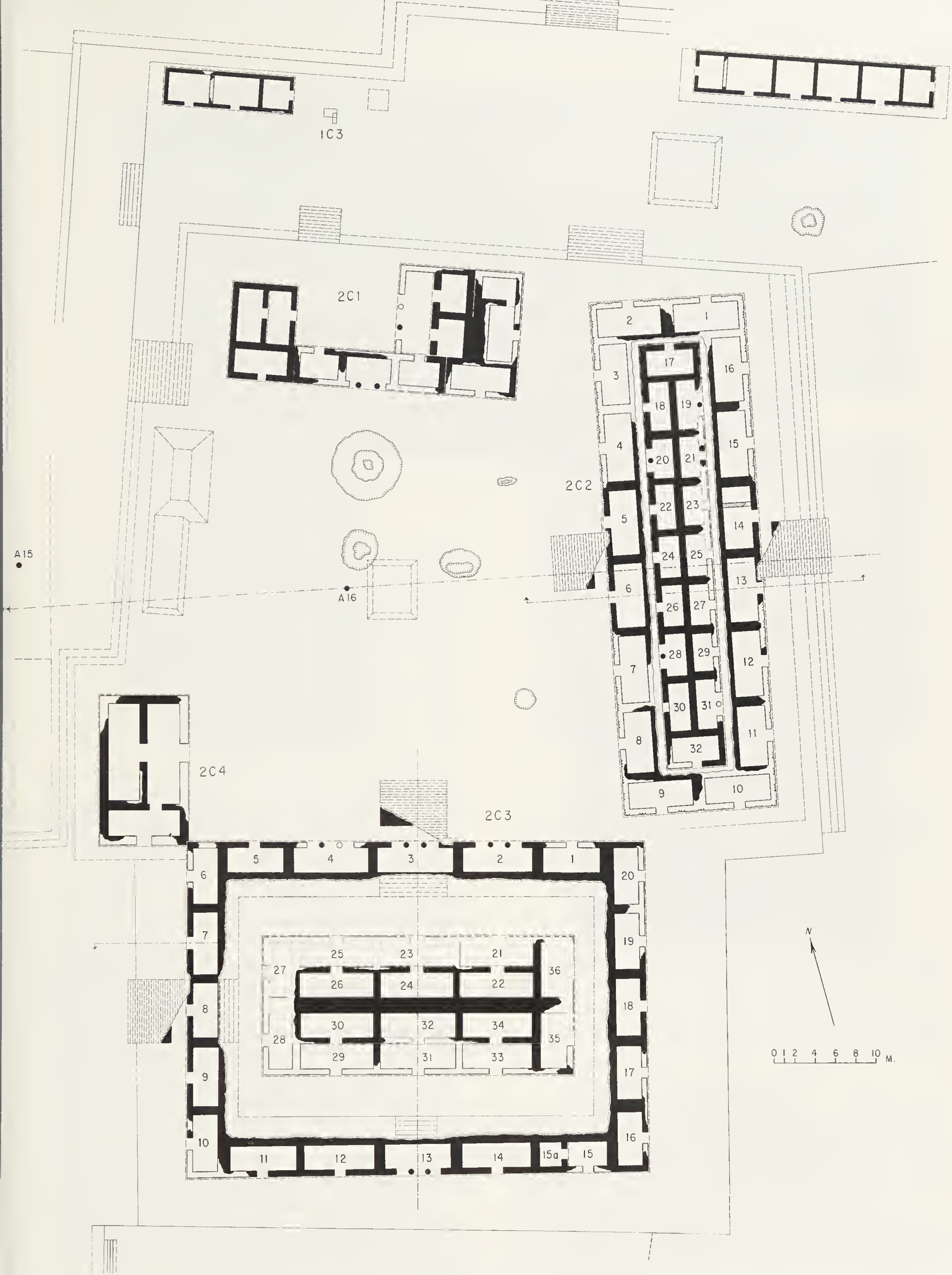


Figure 339. Kabah, East Group. Plan of Structures 2C1–4 and subsidiary buildings.

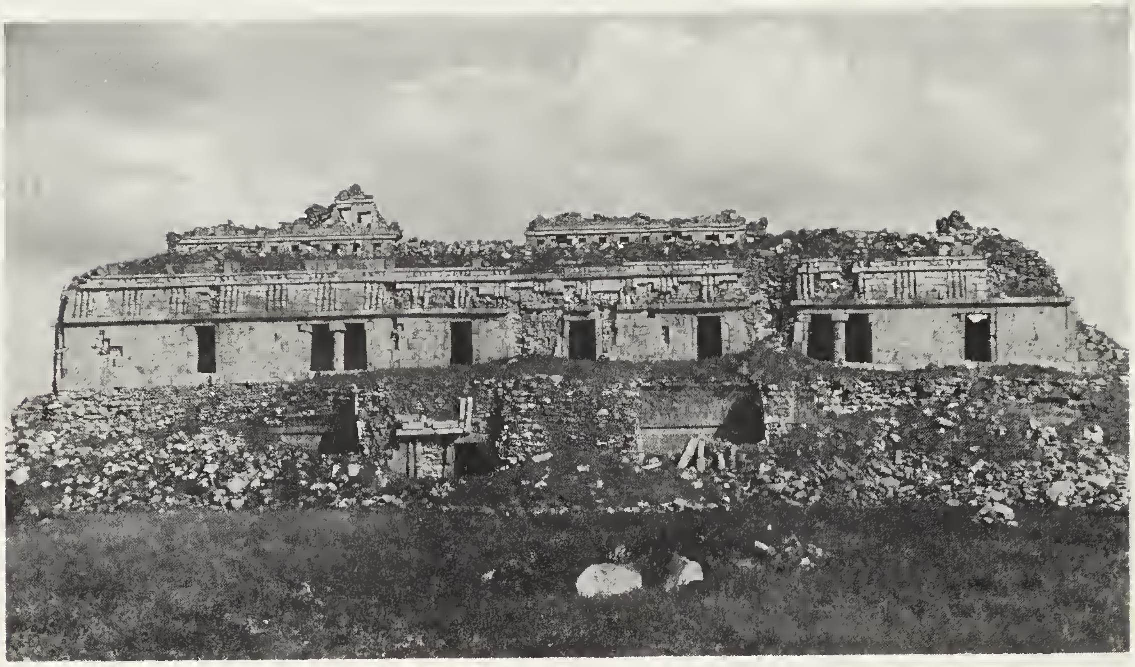


Figure 341. Kabah, Structure 2C2. View of west side of building, looking east.

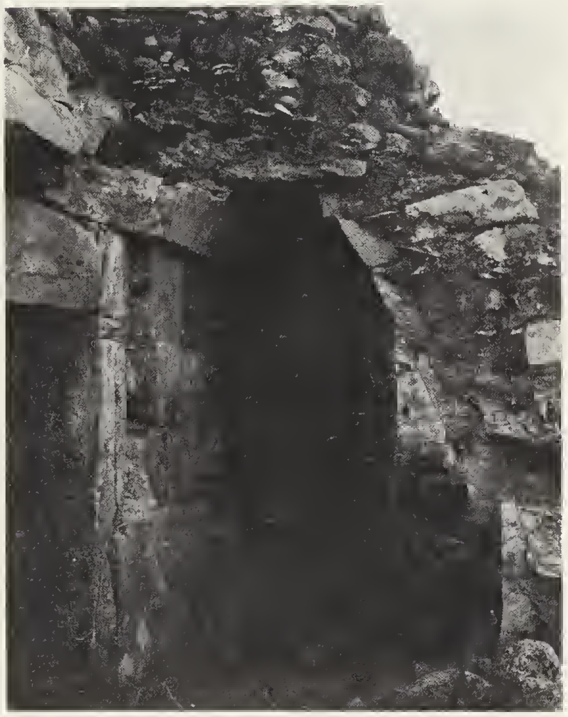


Figure 343. Kabah, Structure 2C2. Vaulted passage under west stairway, looking south.

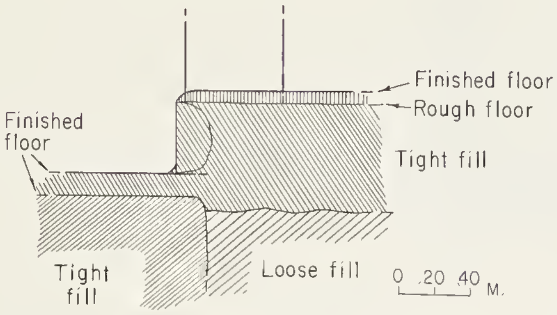


Figure 344. Kabah, Structure 2C2, second story. Section showing floors and underlying construction (cf. fig. 342).

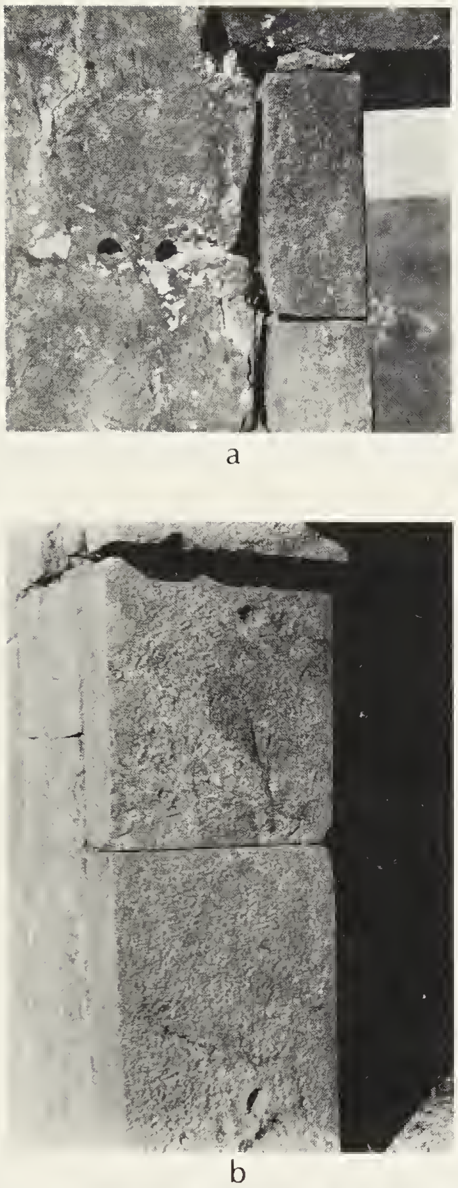
doorjambs, e.g., width of jambs .55 m, thickness of outer walls back from jambs .60–.70 m. Longitudinal medial wall in second story .80 m thick. Transverse walls between rooms .90–1.0 m thick. Plaster-stratum capping walls shows clearly at level of tops of lintels, lower edge of upper facade, and one course below spring of vault. Course of wall stone just below spring of vault normally recessed (figs. 342a, 348). Outer corners of upper story employ large specialized cornerstones, faced on two surfaces (fig. 342d). All outer corners of first story are fallen.

Doorways. All lintels of stone (fig. 349). Jamb stones well cut, and each stone runs full thickness of wall in typical Puuc fashion (fig. 345b). Doorways about .10 m narrower at top than at bottom. Four entrances each employ a single column, a much less common design than a pair of columns. Columns built of two or three drums (fig. 342b), and one example of single stone forming shaft. Usual rectangular capital on each column and corbels on jambs.

Wall Depressions. Cordholders of one-tongue-at-side-of-stone type (fig. 345a). Occur inside doorjambs and on lower story vault faces (fig. 342a). Hemispheroid rod sockets about .05 m in diameter and .01 m deep occur in pairs and singly at top and bottom of jambs (fig. 345b). Placed toward inner edge of jamb stone, usually about .15–.20 m from top and .25–.30 m from bottom.

Vaults and Beams. Slightly concave soffit slopes (fig. 342). Vault stone of normal size, shape, and well faced (figs. 346, 348). Observed no highly specialized vault stone. Capstones mostly very well shaped and faced.

Arrangement of beams in first-story vaults shown in figure 342a. Beams at half height of vault omitted in second story, and central beam hole at top of vault not always present.


a

b

Figure 345. Kabah, Structure 2C2. Wall depressions: a, cordholder by south doorjamb in Room 30; b, rod sockets in north doorjamb of Room 20, looking northeast.

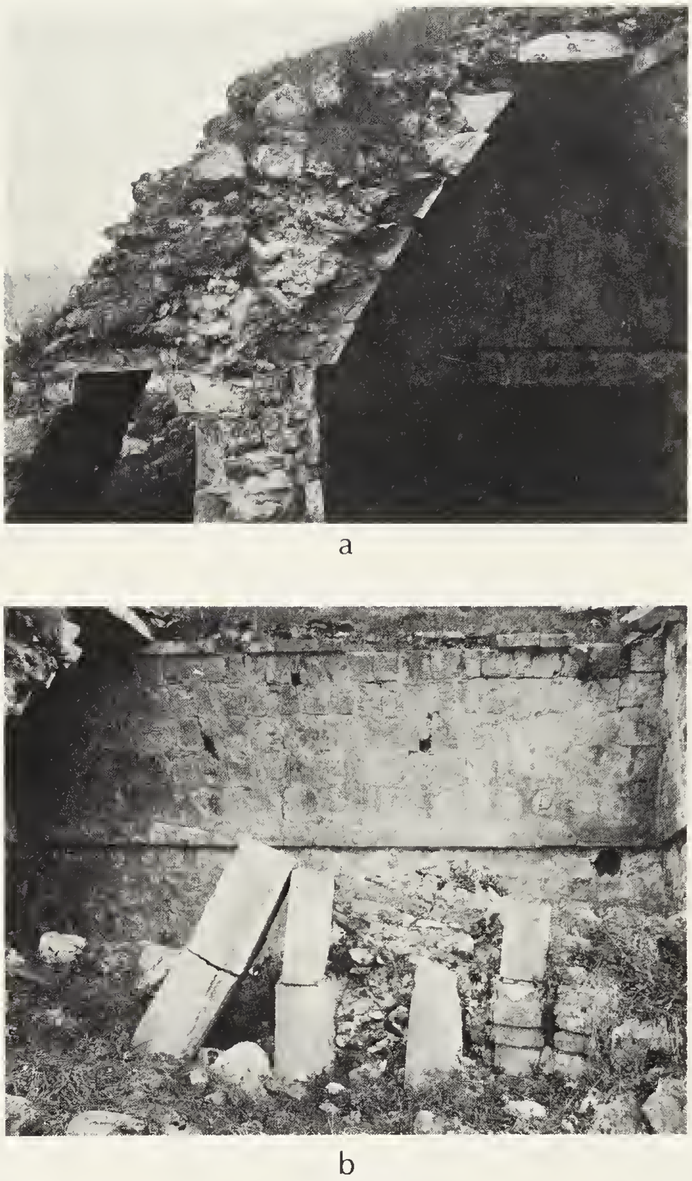

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Figure 346. Kabah, Structure 2C2, Room 6: a, west side of vault in section, looking north; b, doorjambs, fragment of facade, and east side of room, looking east (cf. fig. 342a).

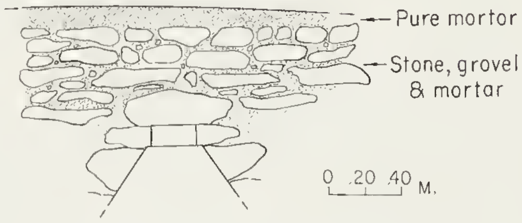


Figure 347. Kabah, Structure 2C2, second story. Section showing roof construction.

Moldings. Only a fragment of upper facade of first story is standing just north of west stairway (fig. 341). Battered upper wall zone forming heavy apron molding that is topped by three-member cornice molding seem to be approximately same on both stories (figs. 342, 348, 349). Overhang of upper facade .10 m greater on lower story and somewhat greater batter to apron molding. Decorative elements in moldings more widely spaced on lower story than on upper.

Simple three-member moldings on roof structure (see below).

Roof. First-story roof cap about .50 m thick (i.e., underside capstones to upper surface of roof); second-story roof cap .65 m thick. Excellent example of roof construction (fig. 347).

Roof Structure. Perforated roof comb of single-wall variety rests directly over medial wall of second story (fig. 342). Roof comb 1 m thick at base, .90 m thick above lowest molding, probably about .80 m above second molding. Built of well-cut and faced stone (fig. 349). Only fragment of second tier standing, but enough to show three-member molding like lower one and to give design of windows (fig. 342c). Do not know design of third tier or of cornice that presumably topped the roof comb.

Decoration. Split columns and spools in pairs in lower wall zone of first story (fig. 348). Facade best preserved in

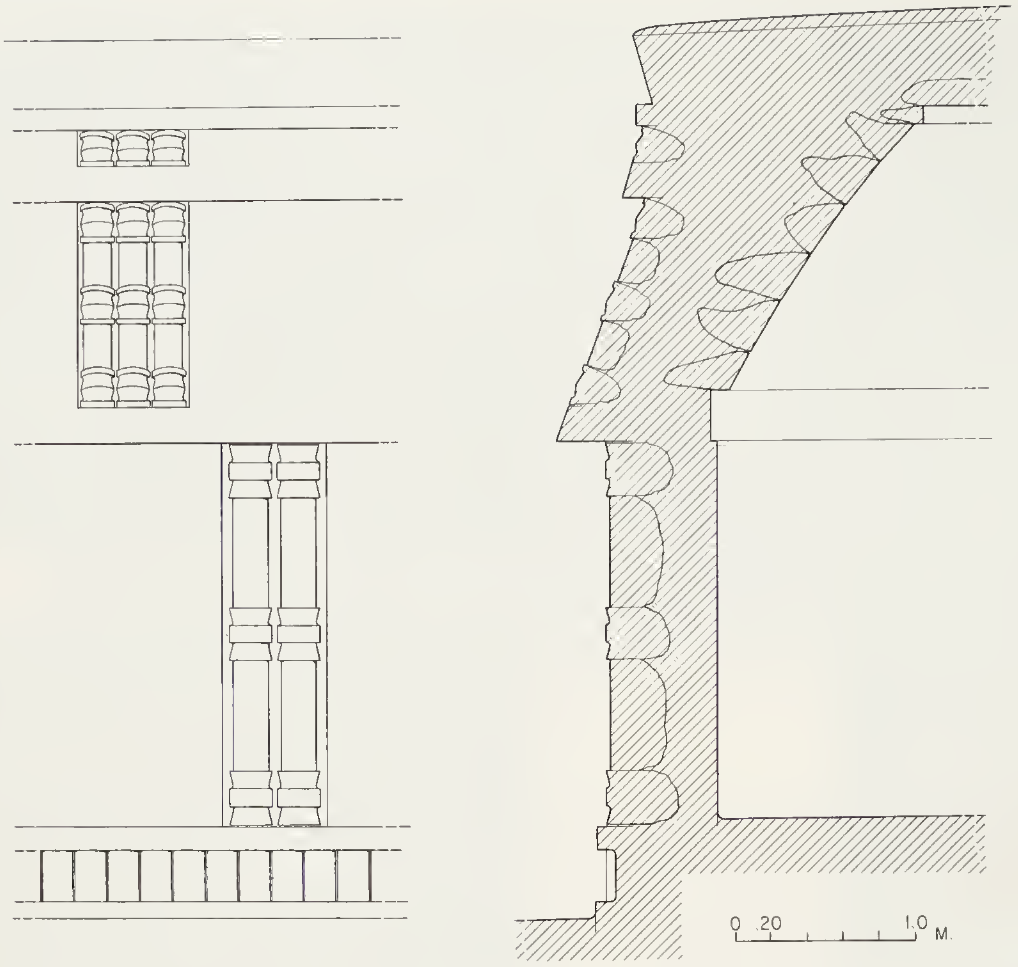


Figure 348. Kabah, Structure 2C2, first story. Partly restored elevation and section showing moldings, facade decoration, and vault detail.

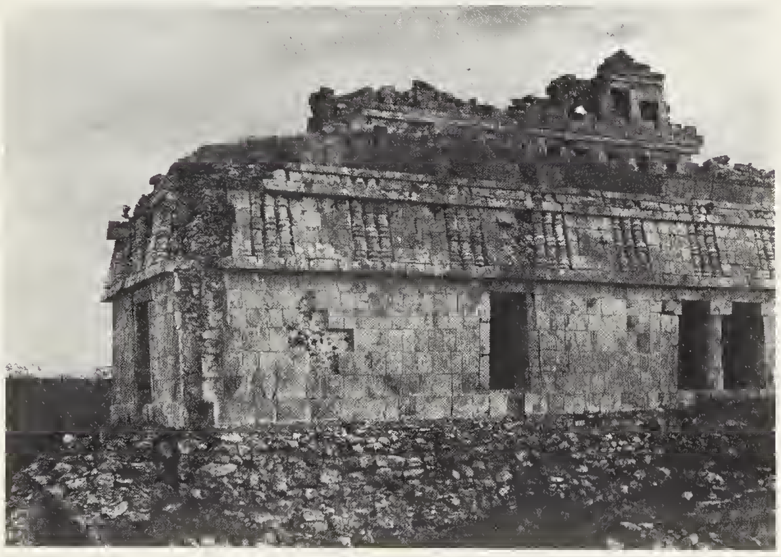


Figure 349. Kabah, Structure 2C2, second story. Northwest corner, looking southeast, and showing simple base molding, simple and columnar doorway, moldings, facade decoration, and fragment of roof comb.

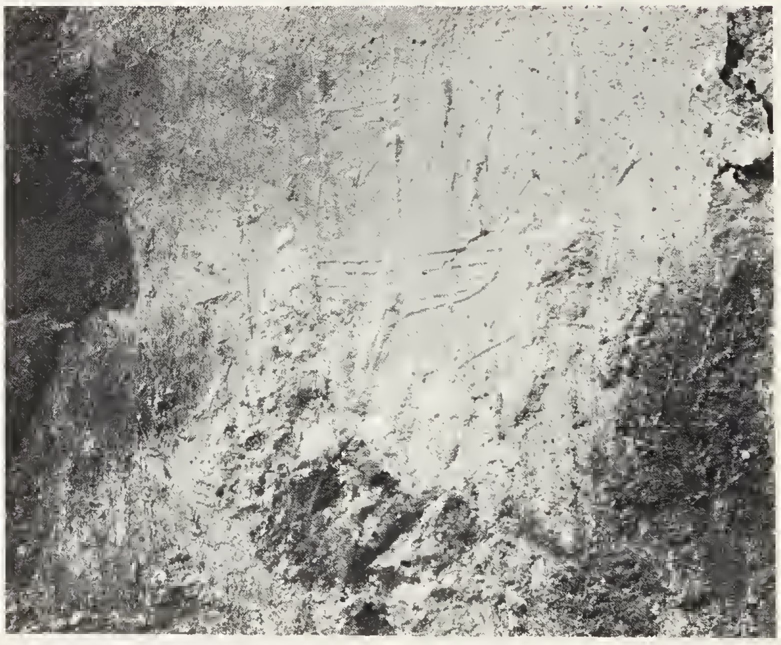


Figure 350. Kabah, Structure 2C2. Graffiti on north wall of Room 14 or 15. Three-masted sailing vessel at center of picture, a similar vessel less clearly seen at lower left, and other badly eroded designs.

passageways under staircases (fig. 343) where panels with columns are spaced 1.05–1.10 m apart. Smaller split columns and spools in groups of three in upper facade zones of both stories (figs. 342, 348, 349). Groups spaced 1.0–1.10 m apart on second-story facade and seemingly about 2.0–2.10 m apart on lower story, but very little of upper facade of lower story standing. Spools in cornice molding directly above each group of split columns on upper story (figs. 342d, 349), and probably same in cornice molding of lower story but not certain.

Fret and steps depicted by perforations in second tier of roof structure (fig. 342c).

Two three-masted sailing vessels incised in plaster on north wall of Room 14 or 15 (fig. 350). Other designs, possibly another vessel, now mainly obliterated by fallen plaster on this wall.

Charnay (1887a, p. 383) reports, "Traces of painting, of which tracings were made, are still visible in the central chamber" of the second story (Room 24). He does not publish the tracing. Maler (n.d., pp. 21–22) also noted the remains of interesting painting on principal wall of same room, commenting it was so faded as to be difficult to copy. My notes have no mention of this painting.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Building seems to have been planned from the outset as a two-story structure and to have been built in a more-or-less continuous operation, subject only to the normal pauses employed by the Maya in erecting their buildings. Both east and west stairways show what appear to be contemporaneous joints with the first-story masonry; the roof surfaces above the first-story rooms run under the second-story plinth and stop (figs. 342, 344), rather than continuing all the way across the building, as would have happened if the builders had been undecided on their next step. The lower of these roof surfaces or floors presumably marks the stage when the first-story masonry was allowed to set and possibly when the loose fill beneath the upper story was completed.

The only secondary construction noted in Structure 2C2 is transverse wall in north end of Room 14 (fig. 339). Wall is .45 m thick and stands to height of spring of vault. No indication it ever stood any higher.

Structure 2C3

(Teocalis with Building on Summit, Pyramid, Teocalli)

Two-story building that has been identified erroneously by several earlier writers as consisting of three stories (fig. 351). The second story, which is badly fallen, rests on a low platform of its own (fig. 339). Although the structure comes near to being symmetrical in plan, it quite clearly faces north on the court of Structures 2C1–4 (fig. 281). It is not clear whether the ceremonial platform and altar at the center of that court served Structure 2C2 or Structure 2C3 or both.

PLAN

See figure 339.

SUBSTRUCTURE

Stairways. Debris indicates stairways to second-story substructural platform on north, south, and west sides (figs. 339, 352), but no steps visible without excavation. Step stones .24 m high and probably five or six steps in each stairway.

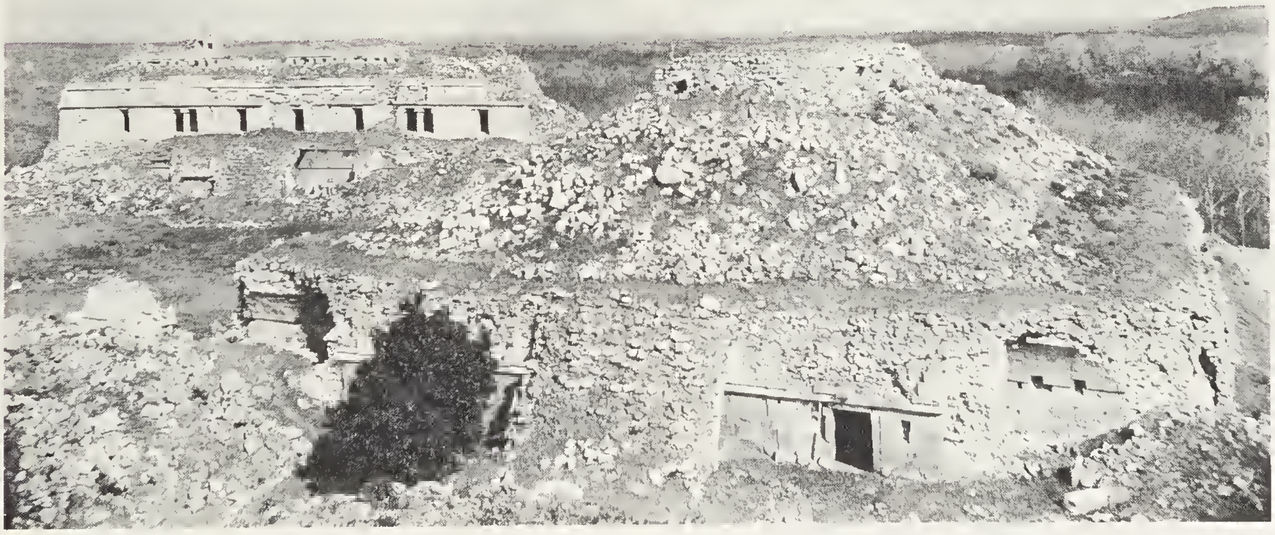


Figure 351. Kabah, Structure 2C3. West side of building, looking east, and showing Structure 2C2 in left background.

Construction. See East Group, above.

Low substructural platform supports second-story rooms. Standing wall about 1 m high is visible. Built of shaped but undressed stone. Much dressed stone in debris, but probably from superstructure, and substructural wall probably never carried faced-stone veneer.

SUPERSTRUCTURE

Plan. See figure 339.

Section. See figure 352.

Elevation. Partial view of structure in Proskouriakoff 1946 (pl. 17).

Base Molding. Simple molding of single course of dressed stone on first story (figs. 352, 354a). Base molding on second story, deeply buried and nowhere visible.

Stairways. Stairways leading from court level to second-story terrace on north and west sides of building. Both staircases are built over half vaults (fig. 352), one end of each capstone resting on upper member of medial molding (fig. 353). Well-cut and faced step stones of northern stairway .25 m high, of western stairway .24 m. Plaster marks on stones .02 m from bottom. No steps in position and visible. Side walls of both staircases once faced with dressed stone. Western stairway seems to be contemporaneous with first-story facade; northern stairway clearly secondary.

Floor. Very little visible. Outside floor at juncture with base molding of first story is of usual buff color. Some buff-colored floor noted in second-story rooms. Presumably the usual step up in floor level to all inner rooms but nowhere visible.

Walls. Usual distinction of better dressed and fitted stone in outer wall facing than in inner. Mixture of outer and inner quality of facing stone in Room 18. Wall construction otherwise normal. Plaster cap beneath medial molding and slightly recessed course below spring of vault are prominent features (fig. 354c). Exterior walls and medial walls with doorways are .65 m thick, tapering to .55 m at jambs. Transverse walls run .85–1.20 m thick. Central longitudinal wall of second story runs 1.50–1.60 m thick.

Doorways. Typical Puuc full-width jamb stones and stone lintels employed in all doorways (fig. 353a). Simple rectangular doorways tend to be rather wide. Doorways widen about .10 m from top to bottom.

Columnar entrances of two columns with rectangular capitals and corbels on jambs (fig. 354a). Shaft of each column made of single stone (fig. 355) or of two drums. Entasis of about .03 m on each side of column drum is common.

Wall Depressions and Projections. Cordholders and rod sockets like those in Structure 2C2 (see above). Rod sockets found on columns and on capitals as well as on jambs.

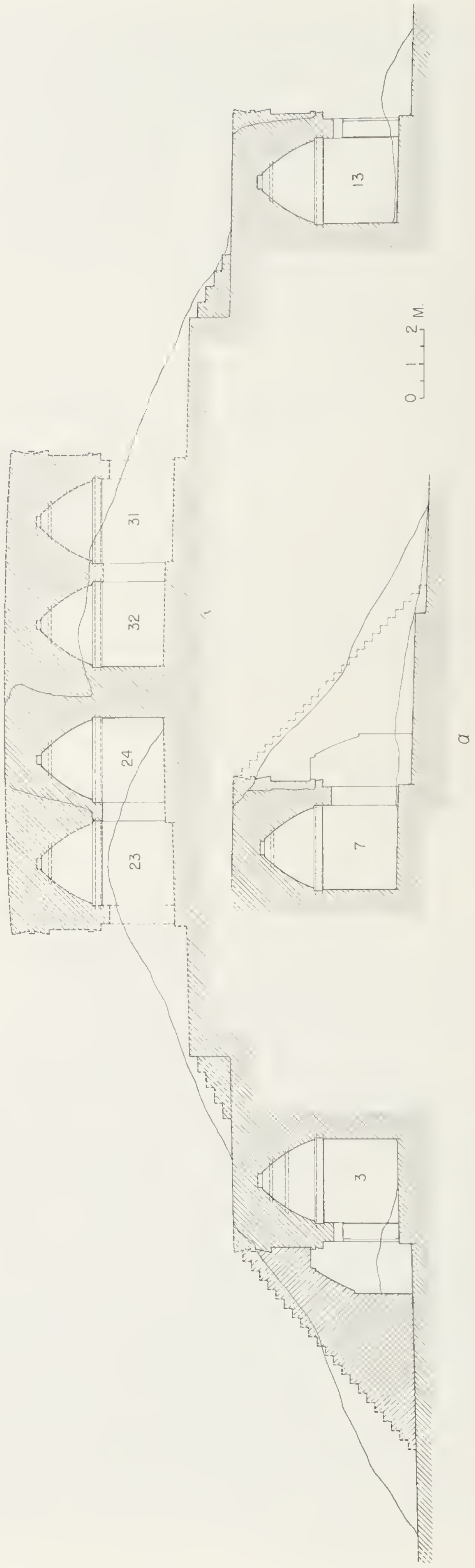


Figure 352. Kabah, Structure 2C3. North-south section through Rooms 3, 13, 23, 24, 31, 32. a, section through Room 7 with west staircase in elevation.

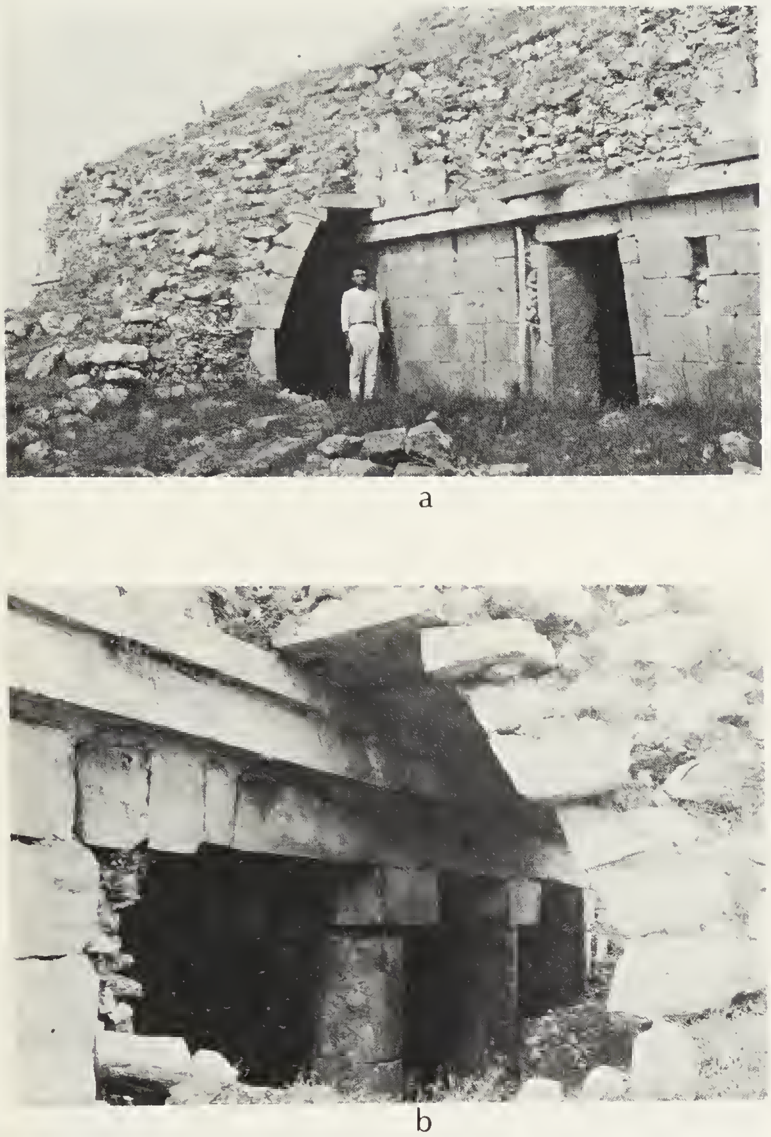


Figure 353. Kabah, Structure 2C3. Stairways: a, west stairway, looking northeast, and showing passage through staircase and doorway to Room 9; b, vaulted passage under north stairway and entrance to Room 3, looking southwest.

Wall peg somewhat resembling human foot observed on wall just below spring of vault in first-story room (fig. 354c).

Vaults and Beams. Vaults normal with very well-cut and faced capstones that vary considerably in length. Usual relative positions of lintels, lowest course of medial molding, and spring of vault (fig. 354a). Axis of vault of Room 15a at right angle to that of Room 15 and to vaults of other south rooms.

Beam holes follow patterns seen in first and second stories of Structure 2C2 (see above). When middle row is present, holes at times are one course higher than in other structure. One room had four beams at top, three half way up vault, two below level of spring.

Moldings. First story carries two-member medial molding and three-member cornice molding (fig. 354b), the lowest member of the cornice molding being made of two courses (fig. 356). Coping course nowhere in place, but stones easily identified in fall so height is accurate in drawing.

No second-story facade visible. Stones in debris suggest moldings like those of first story. A corner coping stone that measures .01 m higher than coping stones from first story.

Roof. Apparently normal. Roof cap of first story about .60 m thick (i.e., from underside of capstones to upper surface of roof), of second story about 1 m thick (fig. 352).

Roof Structure. None standing and no indication there ever was one. Tremendously heavy central wall of second story suggests, however, that roof comb was planned.

Decoration. Only facade decoration seems to have been supported by projecting stone tenons, both well cut and rough, in moldings and upper zone of first story (figs. 354a, b, 356). No carved stone observed in debris; decoration probably executed in stucco.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Northern stairway from court level to second-story terrace is only secondary construction visible. Second story obviously built after first story, but design of lower story, with its great area of solid fill at the center and the contemporaneous western stairway, clearly called for upper story, and no reason to assume any appreciable lapse of time between construction of first and second stories.

Structure 2C4 built against northwest corner of Structure 2C3 and definitely later.

Structure 2C6

(First Casa, Codz Poop, First Palace, Structures 1, 11)

This is probably the most famous building at Kabah. The name Codz Poop, used by the natives in Stephens's (1843, 1:395) time and still current, is translated, *codz,* roll, twist, or wind; *poop,* mat or matting; i.e., rolled mat. According to Mariscal (1928, p. 63) and Marquina (1928, p. 67; 1951, p. 759), the name comes from the coiled snout of the mask in Room 7 (figs. 360b, 371).

Structure 2C6 seems to have been the dominant architectural feature of the East Group (fig. 335). The building, which is elevated on its own substructure in contrast to Structures 2C2 and 2C3, clearly faces west on the court of Structures 2C5, 6 and 2B3 where the ceremonial platform, Structure 2B2, is the central feature. Structure 2C6 is badly fallen except for the western range of rooms, where most of the vaults remain largely intact (fig. 357).

PLAN, SECTION, AND ELEVATION

See figures 338, 340b; and Proskouriakoff 1946 (pl. 17), and G. F. Andrews 1975 (fig. 238).

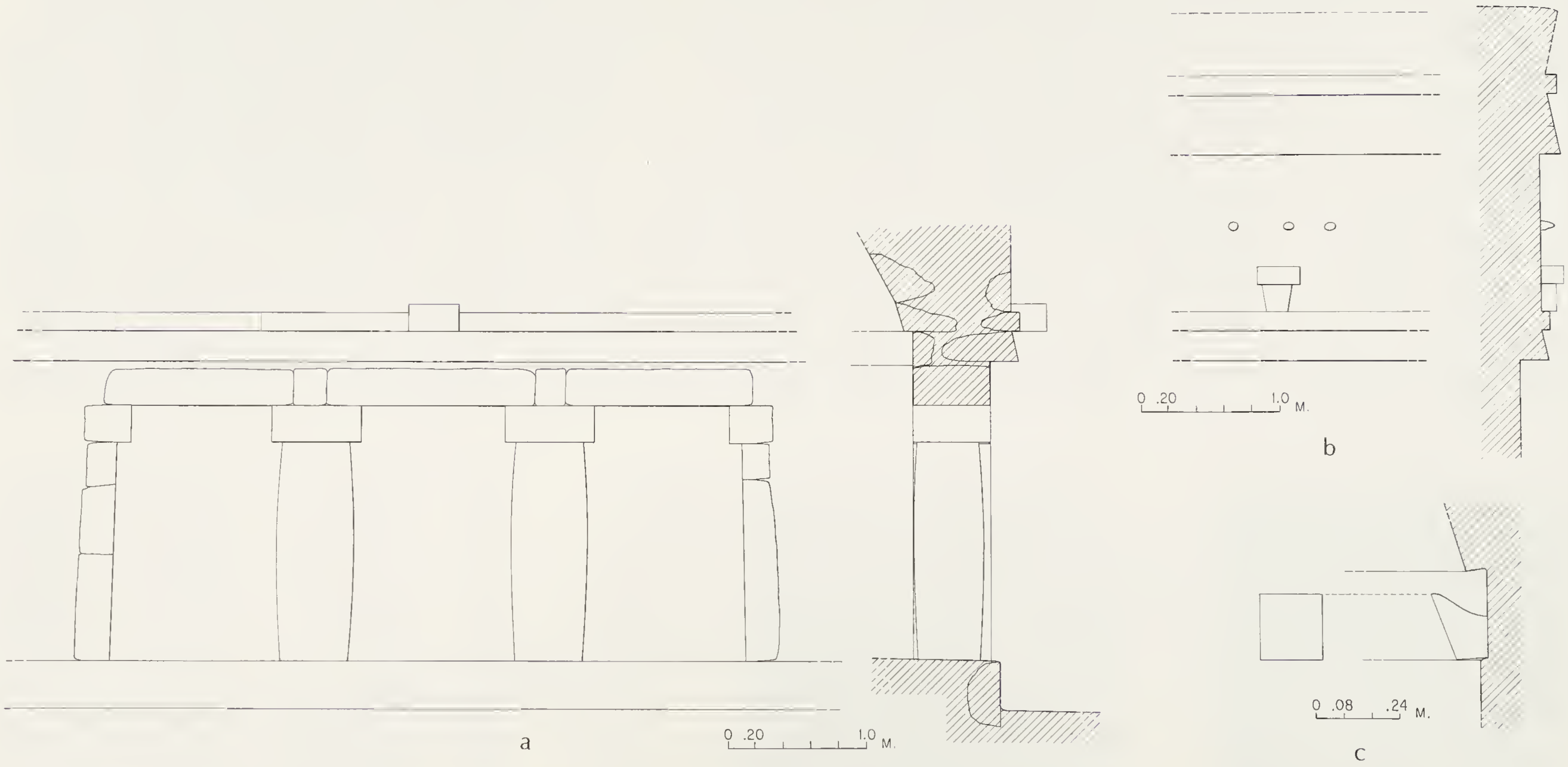


Figure 354. Kabah, Structure 2C3. Architectural details: a, elevation and section of entrance to Room 2; b, elevation and section of moldings and frieze between Rooms 2 and 3, showing projecting tenons; c, wall projection in form of foot.

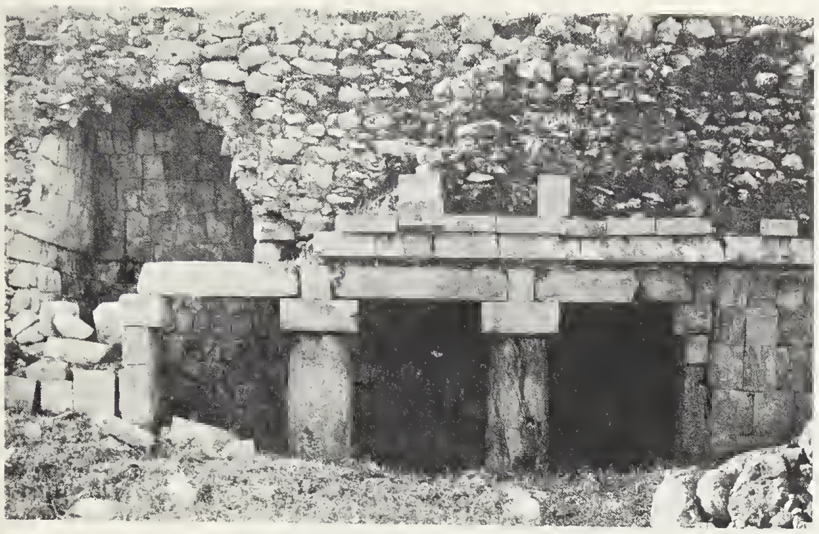


Figure 355. Kabah, Structure 2C3. Entrance to Room 2, looking south.

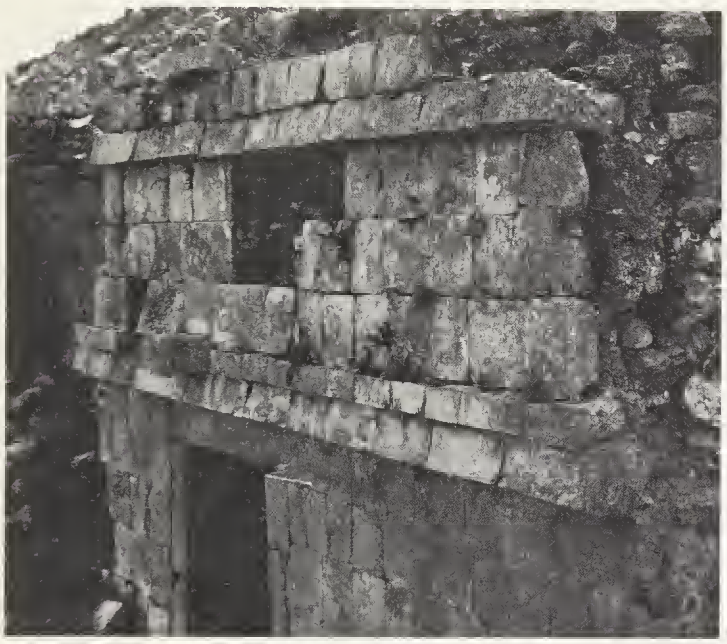


Figure 356. Kabah, Structure 2C3. Facade outside Room 5, looking southeast, and showing doorway to room and moldings.

SUBSTRUCTURE

Stairways. See East Group, above.

Stairways at front and back of Structure 2C6 that lead from court level to building proper are made of well-cut and faced stone. I obtained measure of about .28 m for height of risers in western stairway. Stone in eastern stairway seemed to vary in height, probably averaging about .25 m. Since my work at the ruins, the western stairway has been reconstructed with eight risers and a staircase of faced stone (Mexico 1958, fig. 27; G. F. Andrews 1975, figs. 241–243).

Construction. See East Group, above.

Rectangular platform rises in two terraces to height of some 2.5–3.0 m above court level. Terrace walls are vertical and built of roughly shaped stone (fig. 357b). Construction is like that already described.

Solid central core of superstructure presumably planned as base for second story that was never built (see Secondary Construction . . . , below). I have no notes on the construction of this core. Most probably it is of loose stone fill retained by the masonry of the surrounding rooms.

SUPERSTRUCTURE

Plan. See figures 338.

Sections. See figures 340b, 358.

Elevation. See Proskouriakoff 1946 (pl. 17).

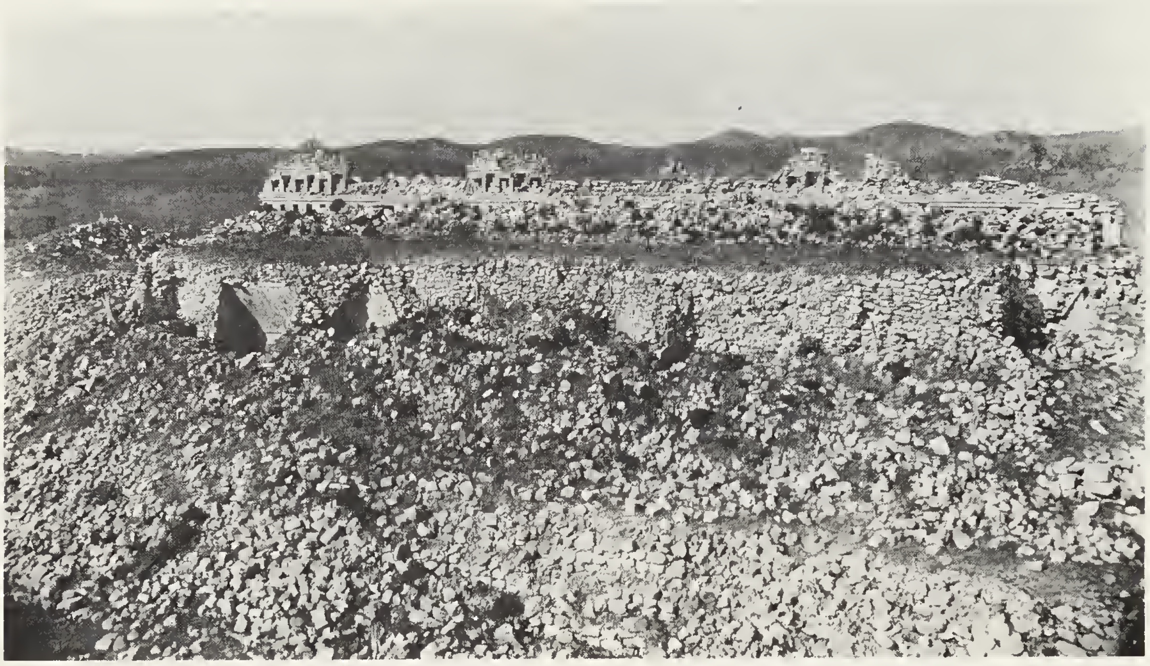
Building Platform and Base Molding. The equivalent of the building platform in Puuc architecture (see Pollock 1965, p. 400) is normally a base molding of varying height and of varying complexity. With Structure 2C6 the building rests on a platform 1.36 m high (fig. 340b) that at the west, northwest (Rooms 1, 2) and southwest (Rooms 13, 14) is decorated by a continuous row of masks, topped by an ornate two-member molding (fig. 367; and see Proskouriakoff 1946, pl. 17); at the south (Rooms 15, 17), and presumably the north (Rooms 25, 26) and east, the platform is decorated by step, fret, guilloche, and curvilinear designs also topped by the same ornate molding (fig. 368). At the east this building platform extends almost 7 m out from the building (fig. 338), and there is some question whether a simple base molding of a single course of faced stone does not run around the building from Room 15 to Room 26.

Across the base of the rear wall of each of the western rooms (Rooms 3, 5, 7, 9, 11) is a great three-member molding .79 m high, whose middle member is formed of colonnettes (fig. 359). The top of the molding marks the floor level of the inner rooms (Rooms 4, 6, 8, 10, 12). This same molding is found in Room 15 and presumably was present in Rooms 1, 13, and 26.

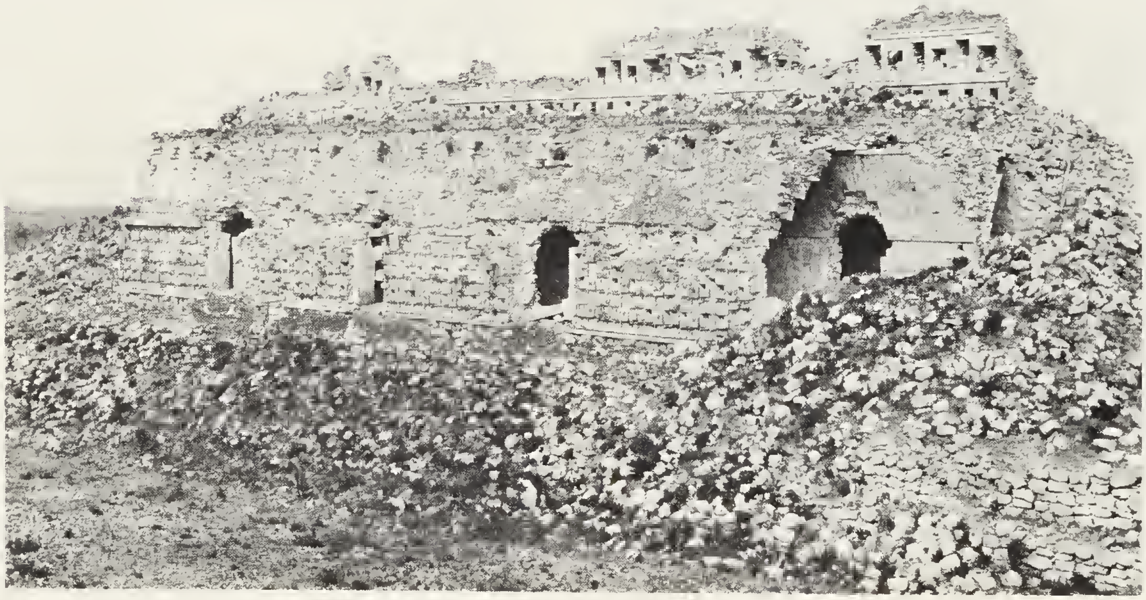
Stairways. Eastern stairway mentioned above (see Substructure) seems to have risen to top of building platform, from which Rooms 15 and 17–26 were easily entered. At west Rooms 1, 3, 5, 7, 9, 11, 13 were reached by using snout and element above snout of mask beneath each doorway as series of steps (figs. 360a, 367c). Mask and snout similarly employed as steps to enter Room 8 (figs. 360b, 371; and see Mariscal 1928, fig. 38).

Floors. Usual buff color. Three floors outside of building at west (figs. 358, 367c). Lowest may be work level rather than finished floor. Large rise in floor level of inner western rooms (see Base Molding, above).

Walls. What can be observed of eastern rooms (Rooms 17–25) walls are normal, running about .65 m thick at doorjambs with exception of Room 21 where jambs are .88–.89 m wide (see Decoration, below).



a



b

Figure 357. Kabah, Structure 2C6: a, east side, looking west, and showing mostly fallen vaults of east rooms; b, west side, looking northeast. Substructural terraces are seen at lower right.

Transverse walls between rooms run .75–1.0 m thick, probably averaging about .80 m.

Outer and medial walls of west rooms (Rooms 1–14) about .85 m thick at doorjambs, and without usual tendency to taper from corners of rooms to jambs. Transverse walls between rooms average about .90 m thick. Medial walls between Rooms 15 and 16 and between Rooms 26 and 27 are .90 m thick at jambs.

Outer wall facing of west rooms entirely of masks. Facing on rear walls of outer rooms (i.e., west face of medial wall) employs finely faced stone associated with outer wall facing (fig. 360b). Stone averages .35–.40 m on face and of usual shape. Typical inner facing stone on other walls averages .25–.30 m on face.

Walls of outer western rooms notable for great height (3 m) to level of spring of vault (fig. 358). Plaster stratum one course below spring clearly marked, but tendency to inset course below spring not very great. Because level of spring rises one course, inset zone two courses high in inner rooms (Rooms 4, 6, 8, 10, 12).

Doorways. Doorways to east rooms seem to have been normal with stone lintels, with exception of that to Room 21. Because of its great width (2.4 m), doorway to Room 21 probably carried wooden lintels. Western,

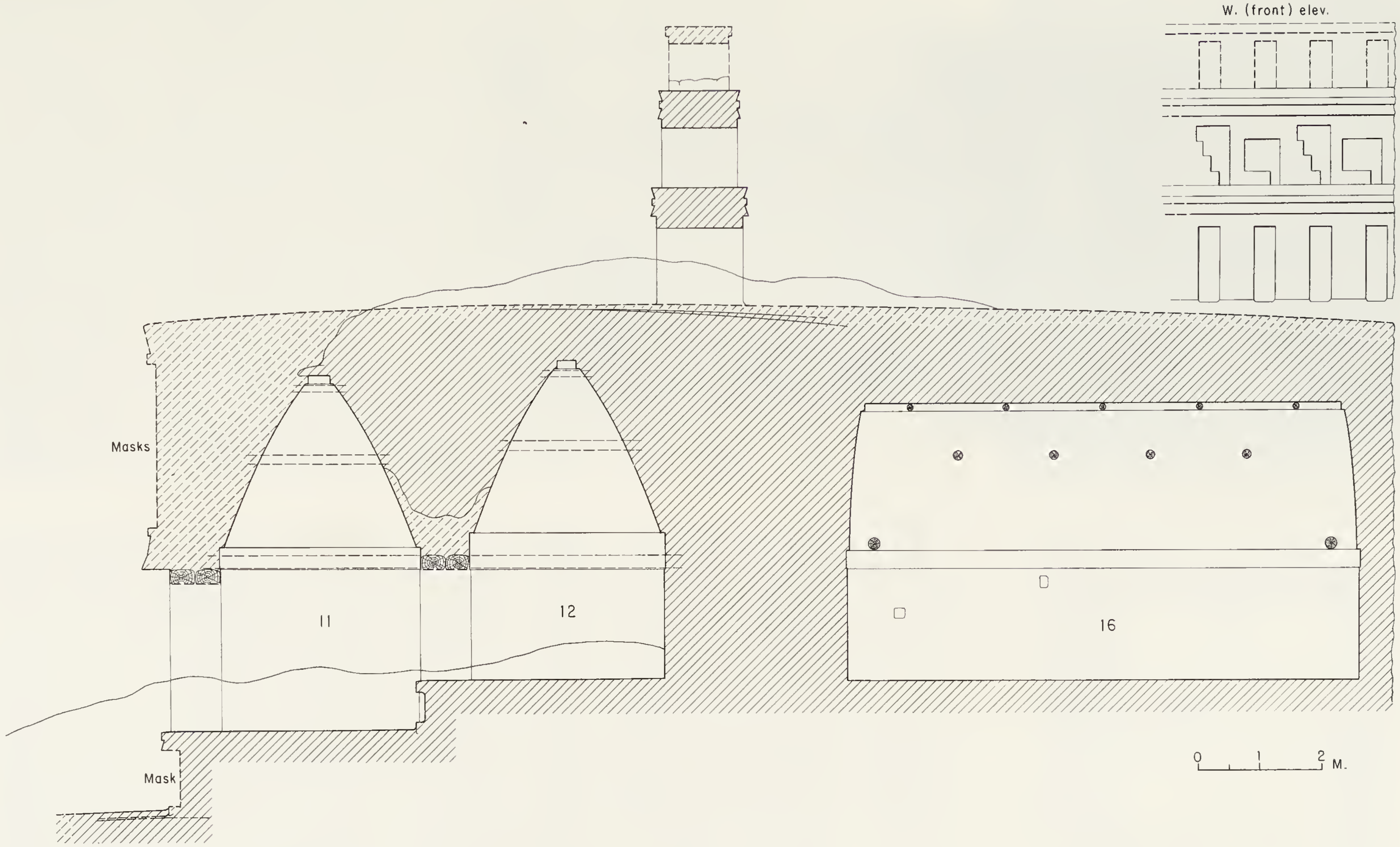


Figure 358. Kabah, Structure 2C6. Section through Rooms 11, 12, 16 (mask steps omitted). Detail of roof comb in elevation.

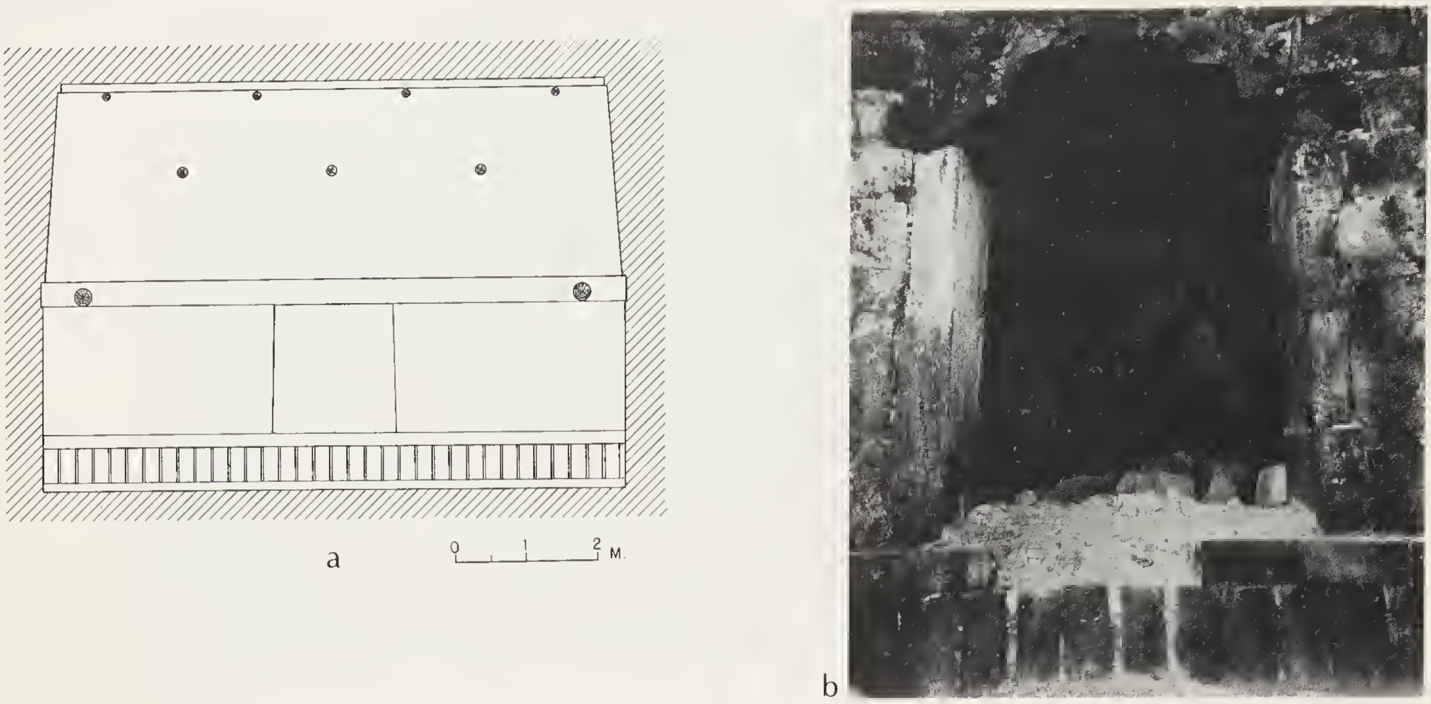


Figure 359. Kabah, Structure 2C6. Room 5: a, north-south section with east side in elevation; b, doorway to Room 6, looking east.

northern, and southern rooms apparently had doorways spanned by wooden lintels. Possibly two beams over each doorway (fig. 358), but none remaining and number not certain. Jamb stones are of full-width variety throughout building and many are very large (figs. 359b, 365). Stones are specialized in shape with hump on back so as to penetrate hearting of wall but to leave straight exposed edge where facing stone of wall joins jamb stone (figs. 360b, 361).

Doorways at west are wide, outer averaging 1.50 m, inner 1.73 m. Doorway to Room 16 is 1.50 m. Outer doorways at west very high (2.43 m). Only slight tendency to narrow at top.

Wall Depressions. Cordholders of one-tongue type, with both tongue-at-side-of-stone, and tongue-at-corner-of-stone varieties. Located on inner walls, usually three at each side of doorway.

Two boxlike niches or cupboards in rear wall of Room 16 (fig. 358). Upper niche is .55 m deep, lower is .30 m. Plastered inside with nicely rounded corners.

Vaults and Beams. Soffit slopes carry usual slight curve and ends of vaults have usual slight inward lean (figs. 358, 359a, 362a). Masonry of vaults of east rooms normal (fig. 362b). Vault stone of north, south, and west rooms exceptionally well faced and many quite large (fig. 363a). Shape of stone normal (fig. 363b, c).

Several plans followed in arrangement of beams (figs. 358, 359a, 362a).

Moldings. Three-member medial molding of design shown in figures 364 and 365 found on west facade and almost surely on facades of Rooms 1, 2, 13, 14, and may have carried all around building. Middle member of molding seems to have carried carving of serpent's mouth at each corner of building (fig. 364). Upper and lower members rounded at corners.

No cornice molding standing and no specialized coping stones found in debris. Fallen stones with guilloche design like top member of medial molding, but heavier (.17 m) and may have come from cornice molding. Possibility that masks rose full height of facade, ending with fillet or the like, and doing away with cornice molding (see Decoration, below).

Roof. Traces of two old roof surfaces .10–.15 m below base of roof structure. These probably merged as shown in figure 358. Lower seems to be temporary roof when vaults of western rooms were erected. Upper was probably roof surface after upper facade was built. Final roof surface nowhere visible at time of my work, presumably laid when roof structure was added (see below).

Roof Structure (see Mariscal 1928, figs. 40, 41). Single wall, perforated roof comb of three tiers (fig. 358). Built of finely-cut and faced stone (fig. 366). Three-member moldings separate lowest tier from middle tier and middle tier from top tier. Only trace of top tier left, but may have had simple rectangular cornice molding .15 m high. Rectangular windows in lowest tier and probably in top tier. Middle-tier openings form step-and-fret design.

Roof comb secondary to earlier roof of western rooms.

Decoration (see Hissink 1934, pp. 45–47, 100–101). As already mentioned, building platform decorated by masks at northwest, west, and southwest (figs. 360a, 367), and by step-fret, guilloche, and curvilinear design at south (fig. 368) and presumably at north and east. Elements from latter group of designs, which may have come from

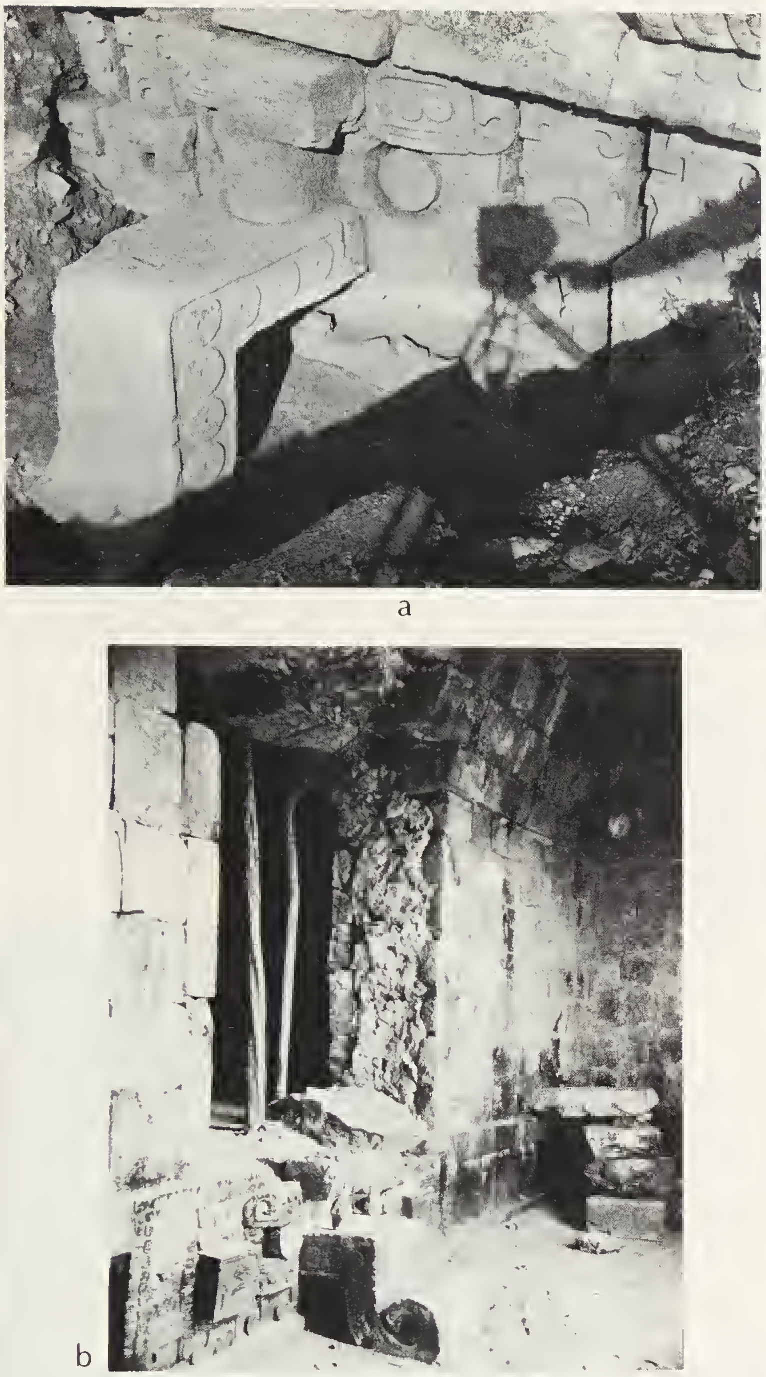


Figure 360. Kabah, Structure 2C6. Mask snout steps: a, mask below doorway to Room 9, looking northeast (cf. fig. 367c); b, view inside Room 7, looking south-southeast, and showing doorway to Room 8 with snout of mask serving as steps (cf. fig. 371). Note hump on back of fallen jamb stone at right side of doorway.

building platform or from wall of building (see below), in debris along east side. Snouts of masks beneath doorways, which served as steps, wider than snouts of other masks.

Entire west facade of building covered with masks (figs. 357b, 365, 367a; and see Mariscal 1928, figs. 39, 43, 44). Only remnants of three lower jaws and butts of two snouts above medial molding at time of my work at ruins, but know from Stephens's (1843, 1:388) illustration at least three tiers of masks stood above molding. This confirmed by holes in masonry where snouts were tenoned, which indicate three and possibly four tiers of masks above medial molding (see G. F. Andrews 1975, figs. 241–244).

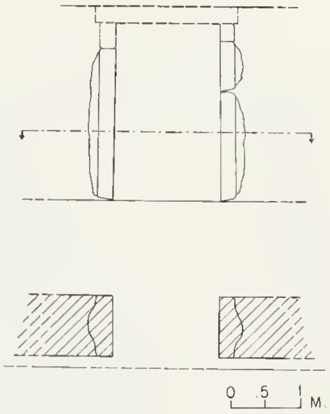


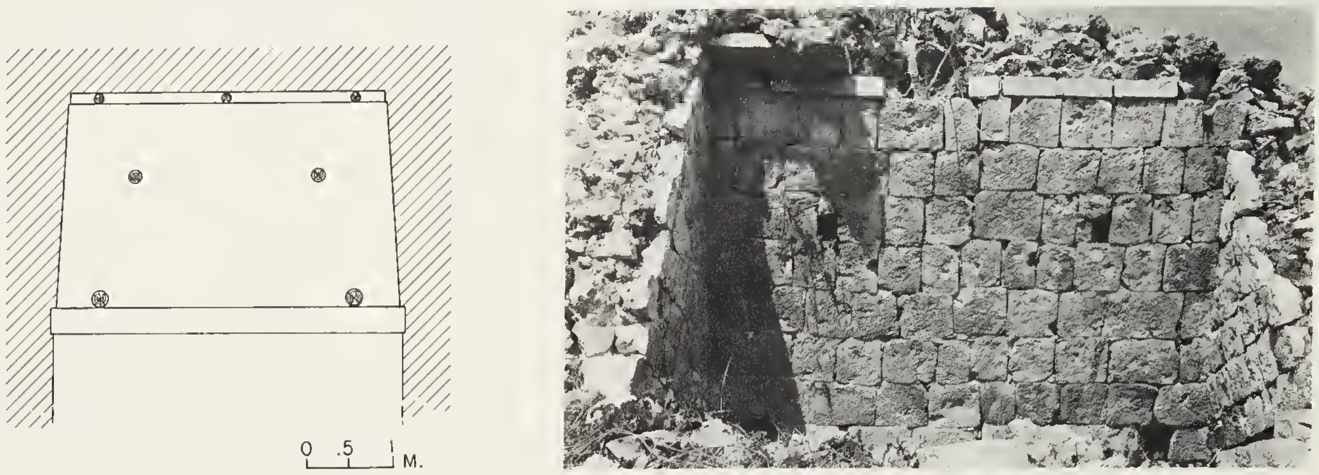
Figure 361. Kabah, Structure 2C6. Elevation and horizontal section of doorway to Room 7, showing hump on back of specialized jamb stones.

Elements in debris suggest masks extended across facades of Rooms 1 and 13 and very possibly across Rooms 2 and 14. Mask elements in fall at northeast and southeast corners of building and few elements along east side. Decoration of lower wall zone in corner between Rooms 14 and 15 (fig. 369) employs motifs seen on building platform. Hissink (1934, p. 46), undoubtedly getting her information from Maler, says, "The frieze surface of the remaining three sides, which are in a considerably worse condition than the west facade, was decorated with half columns and St. Andrew's crosses." I saw nothing to substantiate this assertion, but Maler's view of the ruins was, of course, many years before mine.

Masks on west facade differ from those on building platform in that latter have two ear plugs each whereas former share common ear plug between masks (fig. 367a). Some variation in use of elements above and below ear plugs, and some variation in design of over-eye pieces (eyelids). Few over-eye pieces with featherlike design above. Three sizes of snouts: normal, .20–.26 m wide; medium, .36 m wide; broad, step snouts before doorways approx. .45 m wide. Rather few of medium size in debris. May have come from over doorways. Roll-like element over snouts varies in width with width of snout.

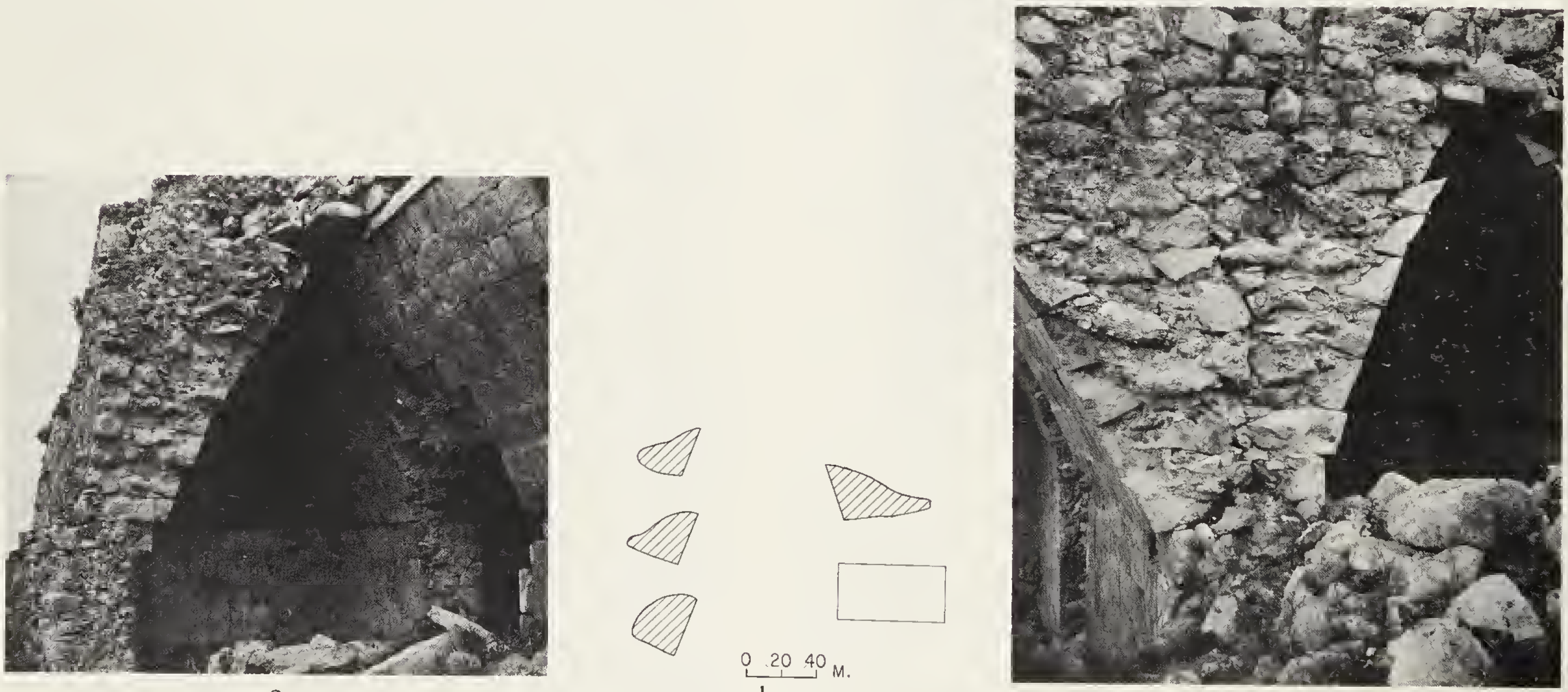
Many decorative elements in debris that cannot be placed. Numerous pieces of feather decoration (fig. 370) along east side of building. Pieces apparently from brow fillet of mask in debris at south and west. Excavation and further search would undoubtedly uncover other elements not recorded by me.

Step-and-fret, etc., decoration on building platform (fig. 368) entirely covered with plaster at one time and numerous traces of red paint. Plaster also once covered decoration in angle between Rooms 14 and 15 (fig. 369), where traces of red paint remain in hollows of braid design. My notes carry no mention of plaster on masks, but record ample traces of red paint in mouths but not elsewhere on masks.



a b

Figure 362. Kabah, Structure 2C6. Room 19: a, longitudinal section with west side of vault in elevation; b, west side of vault, looking west.



a b c

Figure 363. Kabah, Structure 2C6. Vault details: a, Room 11, looking northeast. b, sections and elevations of typical vault stone. c, masonry of vault soffits over wall between Rooms 11 and 12.

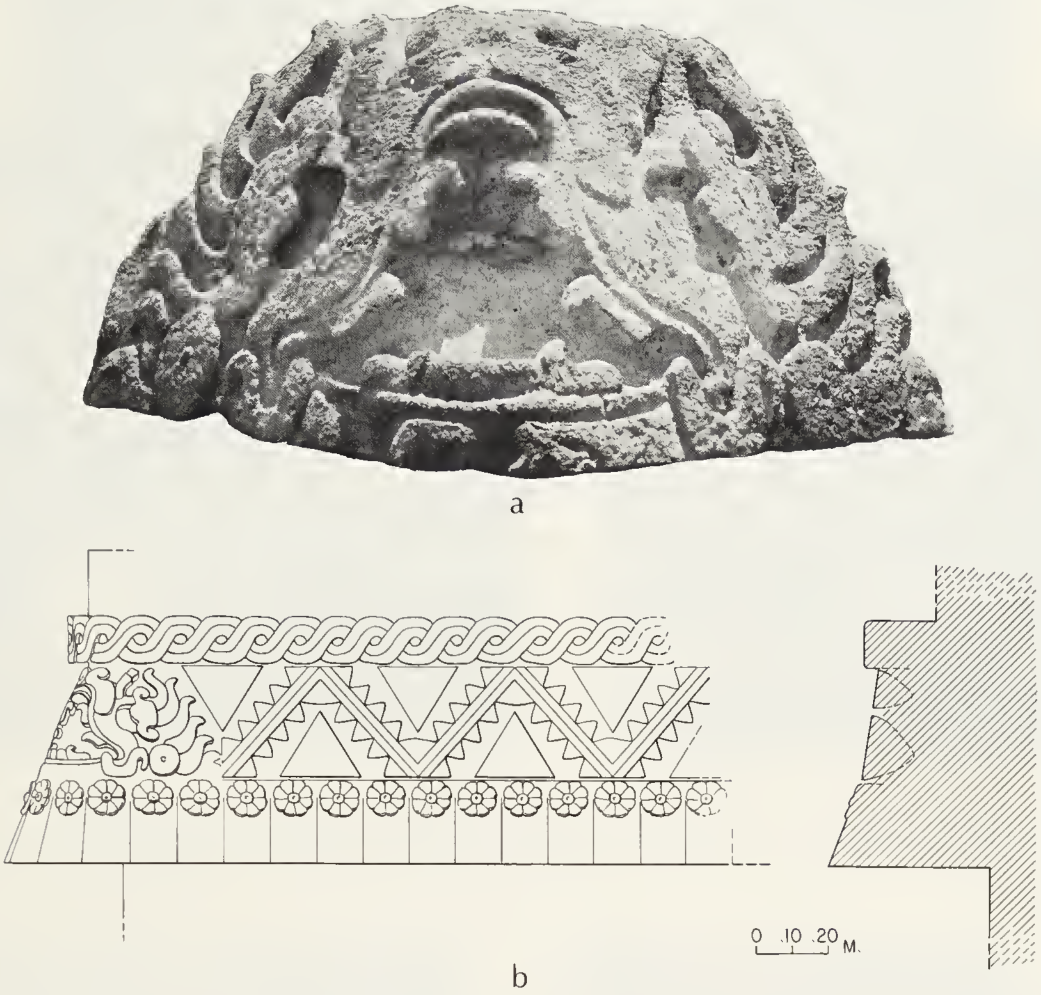


Figure 364. Kabah, Structure 2C6. Medial molding: a, serpent head at corners of building; b, restored elevation and section at corner of building.

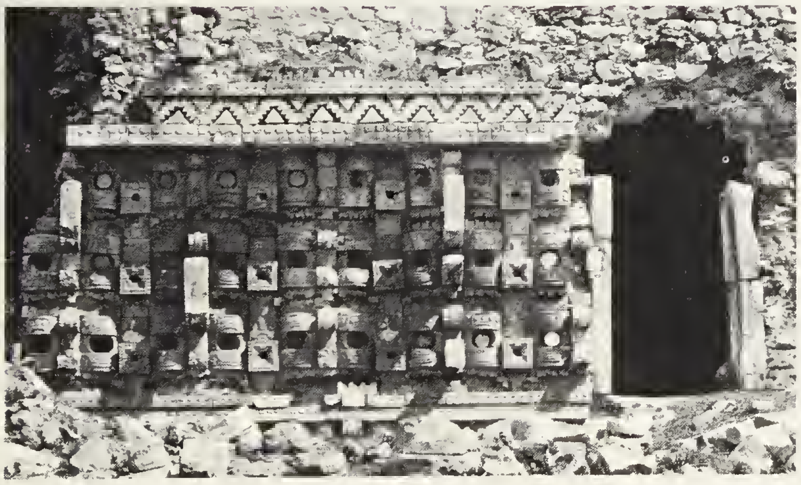


Figure 365. Kabah, Structure 2C6. Part of west facade, looking east, and showing jambs of doorway to Room 5, medial molding, and masks in lower wall zone.

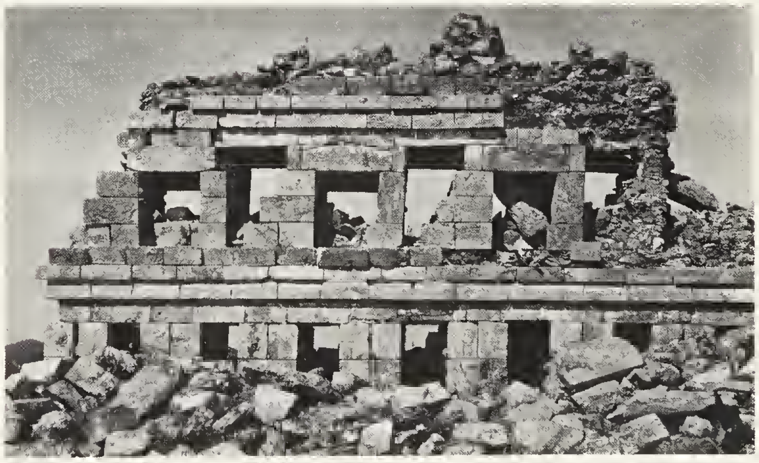
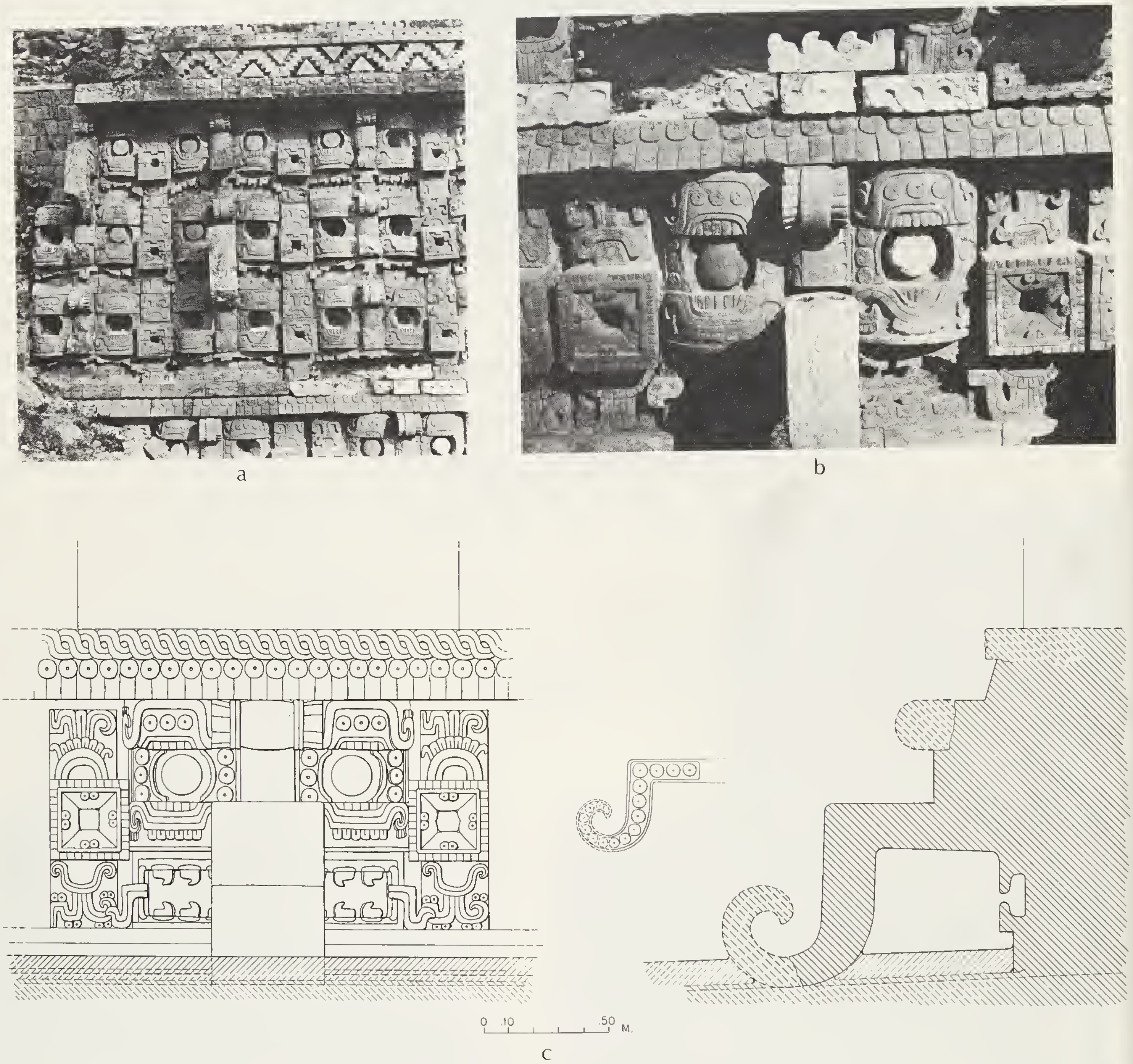


Figure 366. Kabah, Structure 2C6. Rear of portion of roof comb near south end, looking west.

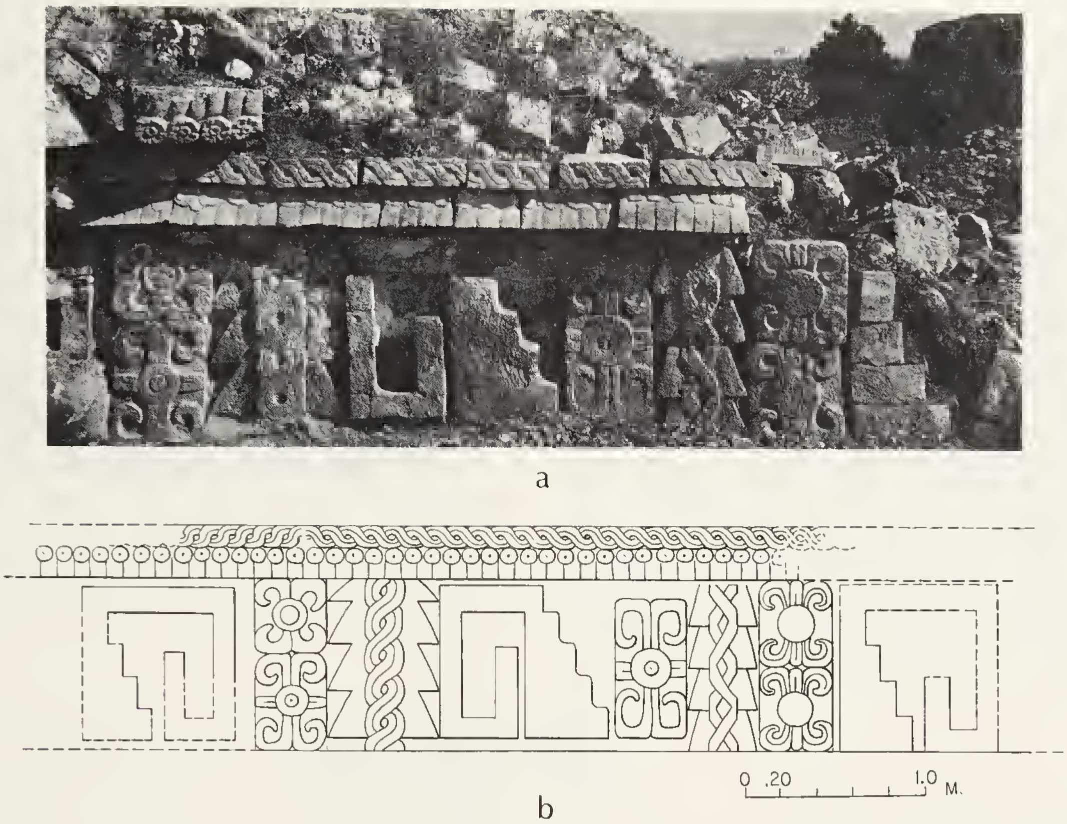


a

b

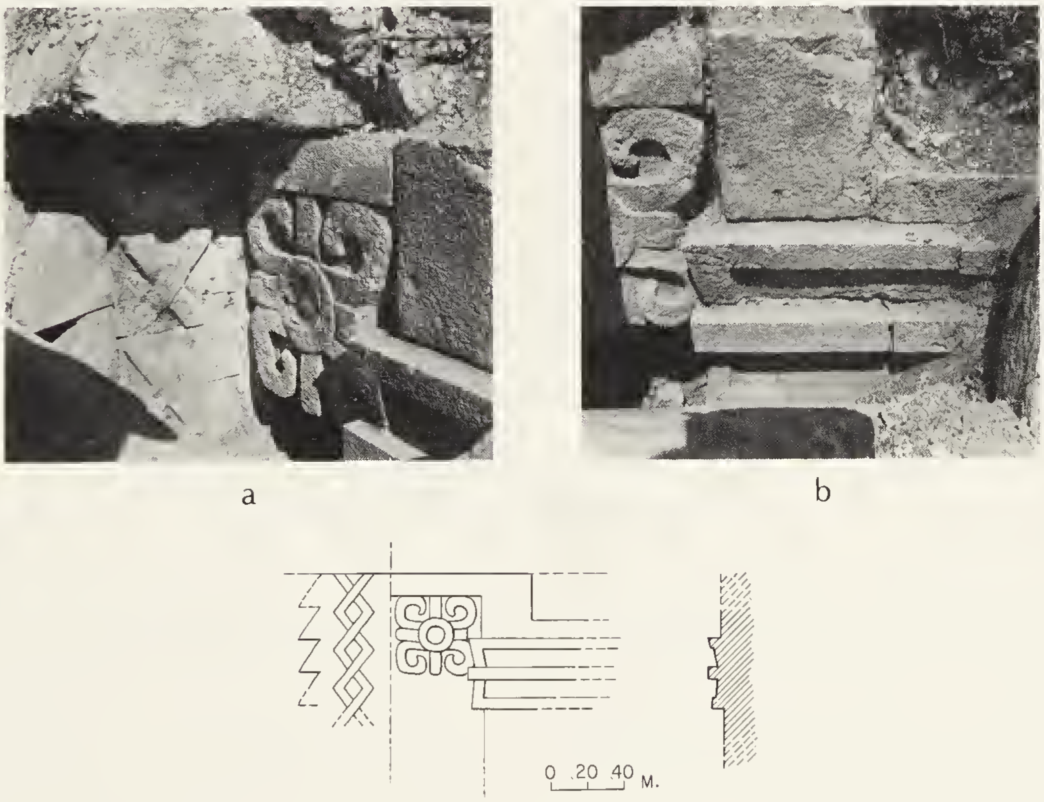
c

Figure 367. Kabah, Structure 2C6. Decoration on west facade: a, masks on building platform and lower wall zone between doorways to Room 3 and 5; b, close view of mask in lower right of a; c, restored elevation and section of mask below doorway to Room 9 (cf. fig. 360a).


a

b

Figure 368. Kabah, Structure 2C6. Decoration on building platform at south: a, platform near southeast corner, looking north; b, drawing of decoration in a.


a

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c

Figure 369. Kabah, Structure 2C6. Decoration below medial molding in corner between Rooms 14 and 15: a, view looking northwest; b, view looking north; c, drawing (laid flat).

Interior decoration consisted of mask in Room 7 (figs. 360b, 371; and see Mariscal 1928, fig. 38), base molding in north, west, and south outer rooms (see above, and fig. 359), and sculptured jambs in doorway of Room 21. Each jamb consists of two stones, the northern jamb having total height above floor level of approximately 2.06 m, southern jamb of approximately 2.03 m (figs. 372, 373). Total width is .88–.89 m. As these are important sculptures, I give two drawings, which differ somewhat, for comparison. Photographs of the jambs have been published by Morley (1956, pl. 75 c, d; legend confused with Xculoc jambs), by Pijoan (1946, figs. 760, 761), and by Proskouriakoff (1950, fig. 103a, b). See Pijoan 1946, pp. 474–475; Proskouriakoff 1950, pp. 169–170; and Tozzer 1957, 11:17–18, for discussion of sculpture.

Several graffiti in plaster on south jamb of doorway to Room 10. Two of the scratchings seem to depict two-headed birds. Another conceivably, but not too likely, represents a fish.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Impossible to be certain of sequence of construction without excavation. Western rooms appear to be primary, and very probable that all but eastern rooms (Rooms 17–25) are of same period. North end of building indicates contemporaneity of all but eastern rooms. South end, on other hand, suggests that Room 14 may be secondary and Rooms 15 and 16 later than Room 14, as seen in joint of outer walls of Rooms 14 and 15 (see fig. 338). Decoration other than masks in outer angle between Rooms 14 and 15 further suggests new period of building. Against this conclusion is fact that small piece of outer wall of Room 14 that lies inside Room 15 was not faced prior to construction of latter room, and proportion of vaults of Rooms 15 and 16, quality of masonry, and molding across base of rear wall of Room 15, all ally these rooms with those at west. Probable that Rooms 1–16, 26, and 27 represent pretty much a single plan and effort, but that building did not go on evenly at all places (e.g., lag at south vs. north) so what appears to be two or more periods of building merely represents the progress of the work.

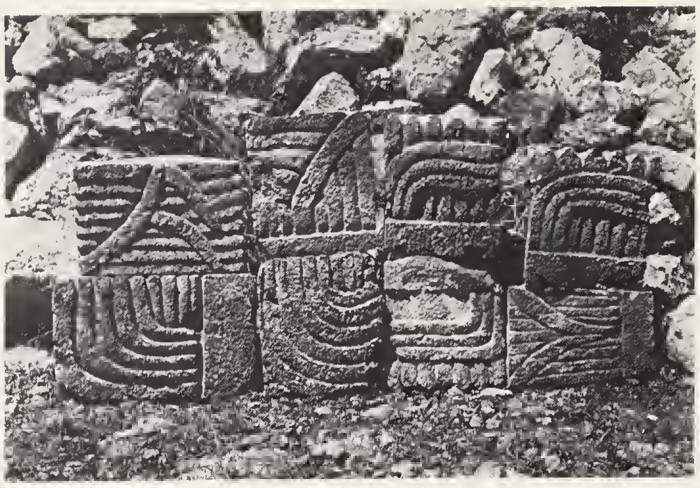


Figure 370. Kabah, Structure 2C6. Fallen pieces of decoration from east side of building.

Eastern rooms seem latest. Workmanship different, stone lintels instead wood, different decorative elements in debris. Rough masonry face separates these rooms from solid central core of building and from north and south rooms (fig. 357a), but fact that this face seemingly was not finished with usual dressed stone facing shows builders planned additional construction. In other words, the eastern rooms or at least some construction on that side was planned from the start.

Large central core of building suggests second story was planned. Roof comb, which is secondary to early roof, apparently built in lieu of second story.

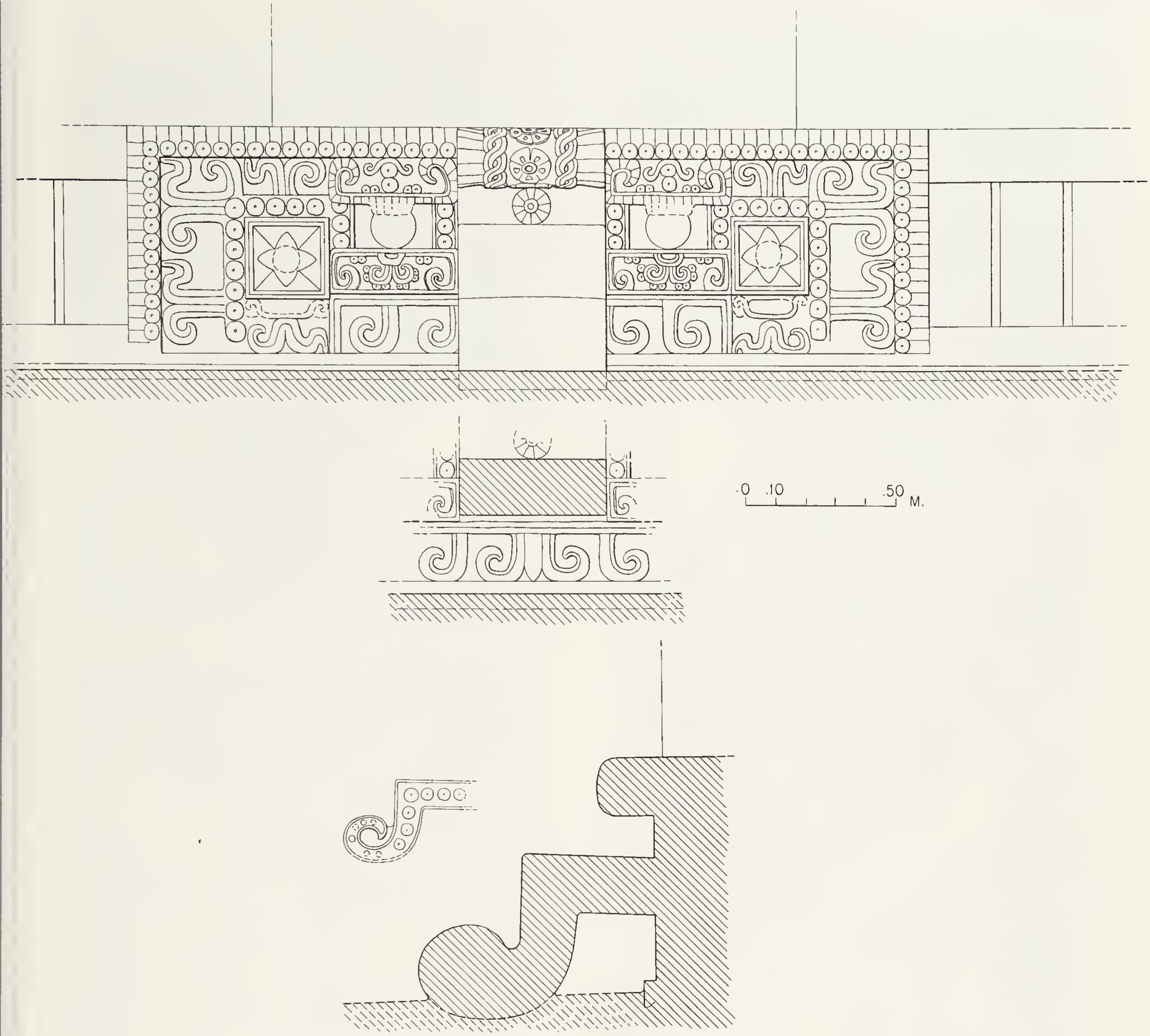


Figure 371. Kabah, Structure 2C6. Elevation and section of mask below doorway to Room 8 (cf. fig. 360b).

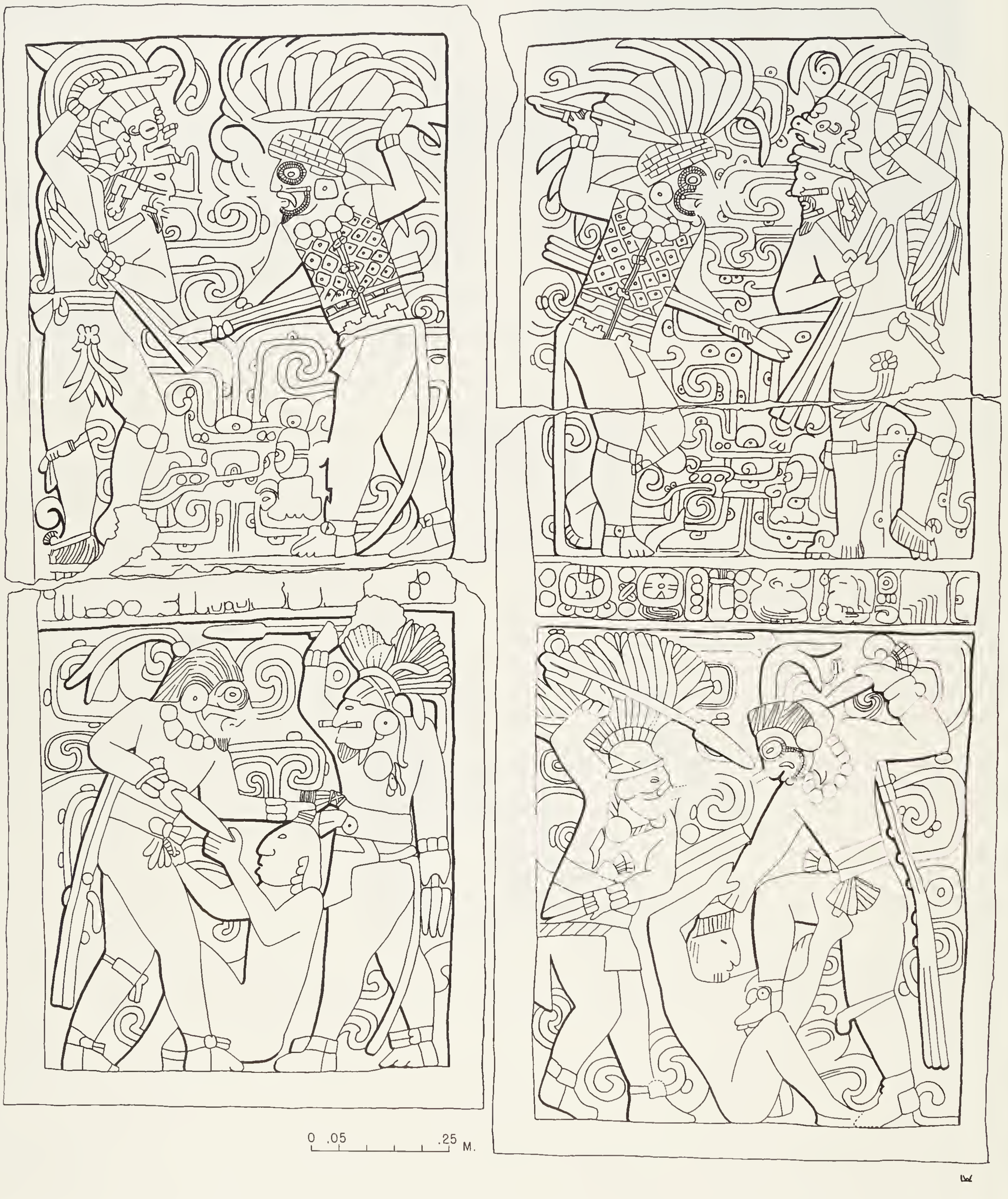


Figure 372. Kabah, Structure 2C6. Sculptured jambs from doorway to Room 21 (south jamb at left, north jamb at right). Drawing by Laura Wiggins Putnam.

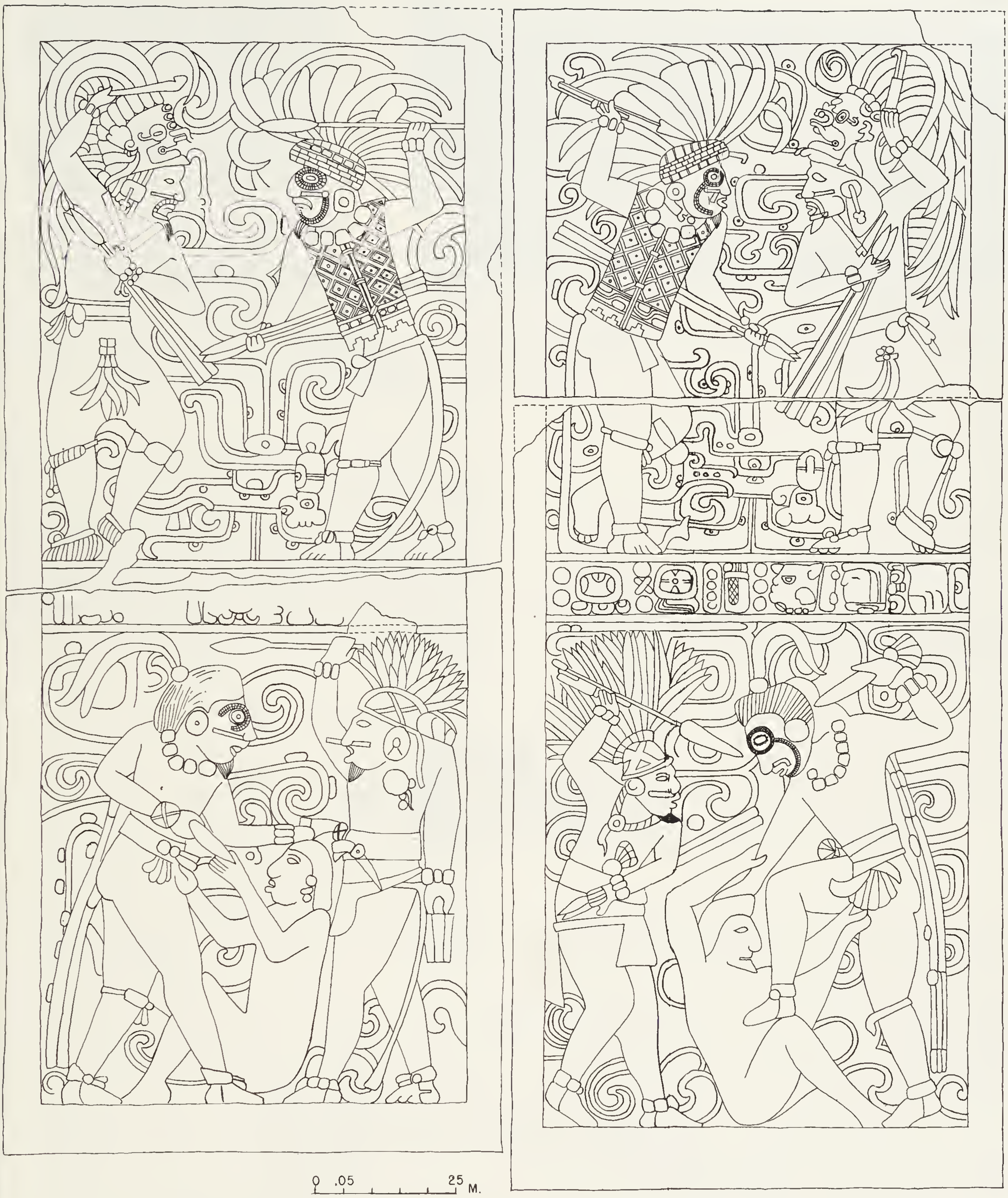


Figure 373. Kabah, Structure 2C6. Sculptured jambs from doorway to Room 21 (south jamb at left, north jamb at right). Drawing by Aubrey S. Trik.

Structure 2C7

Structure is of interest in appearing never to have been completed (see below). Very limited amount of low substructural terracing. Little more than enough to support building and small masonry platform in front (fig. 374a). In spite of limited size of terrace and unfinished nature of structure, remains of low-walled dwelling type of building lie at north end of terrace. Circular depression in loose fill at northwest corner is suggestive of chultun or open catch basin.

Altar 21 associated with small masonry platform in front of building (see Monuments, below). Presence of altar raises question of time of dedication of structure. Small masonry platform, upon which monument presumably rested, suggests altar was installed near start of construction and in any case before completion of building. Time of installation of altar and of dedication of structure, if latter event ever in fact occurred, can only be guessed, but association of remains at this location seems to have bearing on these questions.

SUPERSTRUCTURE

Plan. See figure 374a.

Section. See figure 374b.

Base Molding. Heavy three-member molding over 1 m high with colonnettes in middle member (figs. 375a, 376). Oversized colonnette at corners of building. Stone work of fine quality.

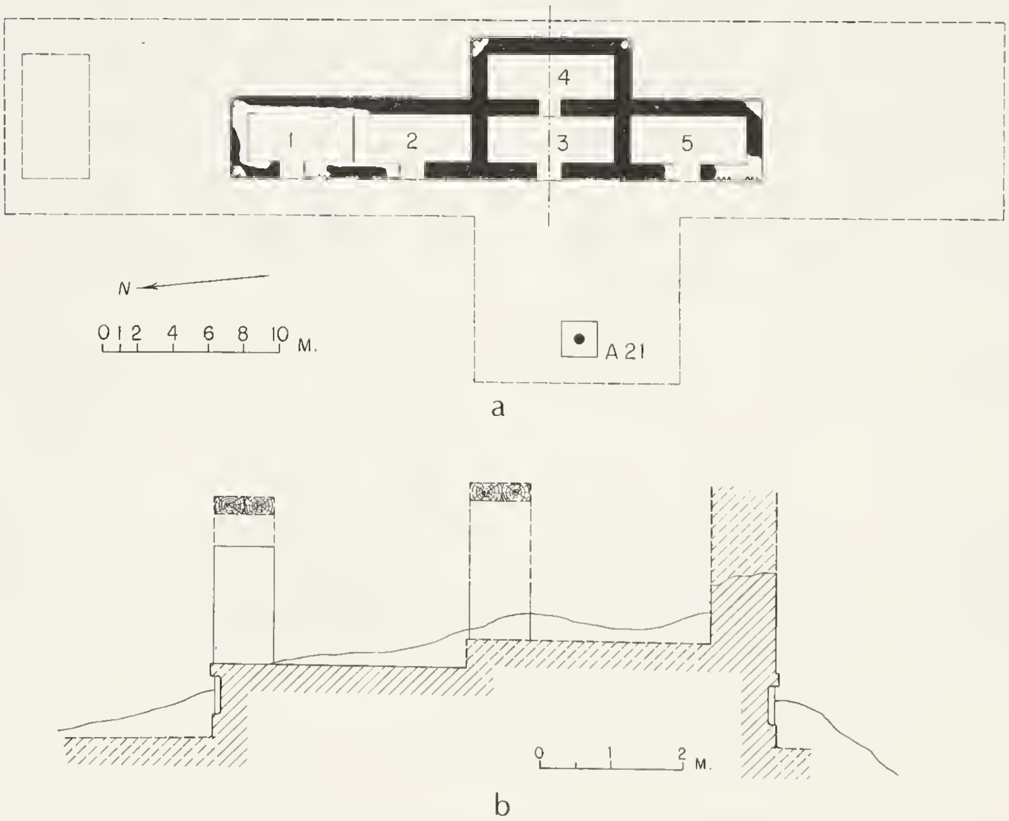
Walls. Front and medial walls .85–.86 m thick at doorjambs; rear wall .90–.92 m thick; transverse walls .90–1.0 m thick. Outer facing of finely cut, well-fitted stone running about .40 m square by .25 m thick (fig. 375b). Sharply beveled at edges (fig. 376a) and a truly specialized wall stone. Inner wall surfaces are of less well-dressed stone, excepting west face of medial wall (fig. 375b), which is finished with wall stone of quality used on outer wall surfaces. This is in accord with usual custom.

Doorways. Outer doorways about 1.40 m wide, inner doorway 1.20 m. Jambs of large well-cut stone (fig. 375b), single stone up to 1.65 m high. Apparently two stones to each jamb. Judging from fallen stones, doorways about 2.10 m in height. No lintels remaining. Either of wood or never placed in position. If doorways were of height suggested here, lintels would have been only .24 m thick, which suggests wooden beams were used or contemplated.

Moldings. No molding stones found in debris, and medial molding and everything above it seem never to have been erected.

Decoration. Split columns and spools arranged in pairs across front of building (figs. 375b, 376). Pairs more widely spaced at center of facade than at ends (fig. 374a).

Three-quarter column with rounded base and capital at northern and eastern outer corners of building (fig. 376). None at south as further construction seems to have been planned there.



a

b

Figure 374. Kabah, Structure 2C7: a, plan. b, section through Rooms 3 and 4.

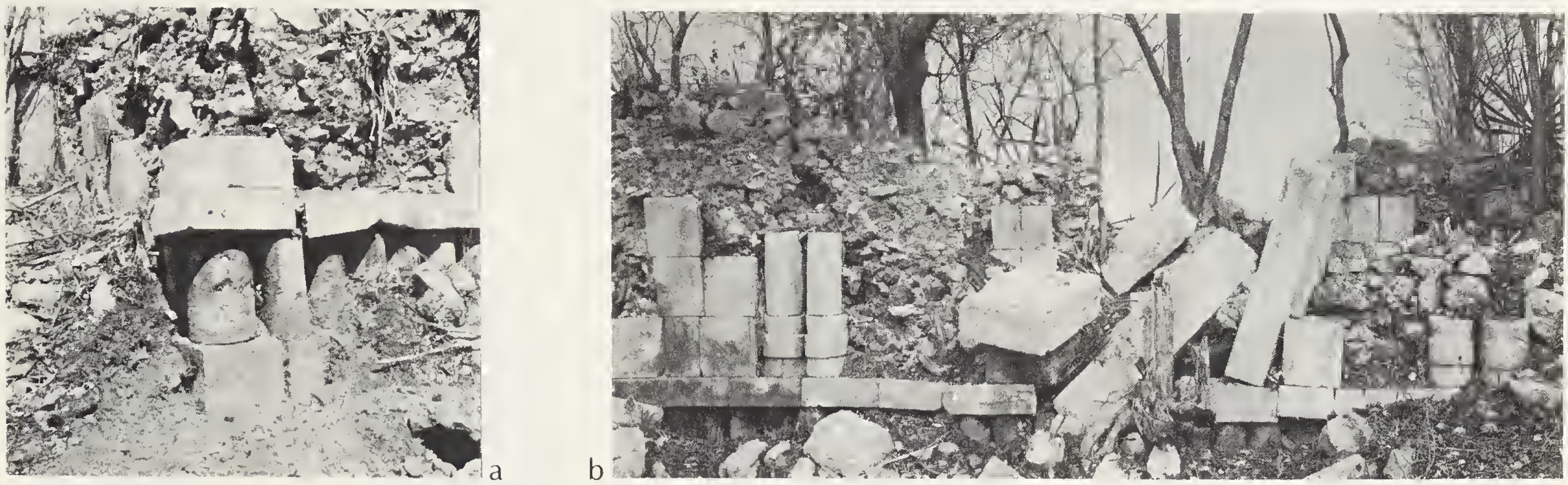


Figure 375. Kabah, Structure 2C7: a, base molding at southeast corner outside Room 4, looking northwest; b, remains of front of building, looking east, and showing tipped jambs of doorway to Room 3, wall facing in front and rear walls of Room 3, and remains of banded facade columns.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Building seems quite surely never to have been completed. Relatively little debris in rooms or around outside of building, just about enough to account for fall of walls but not of vault or of upper-facade masonry. No vault stone or molding stone observed in debris. Many finely cut and dressed wall stones of quality used for outer facing found in north room. Suggests their having been stored here to await further construction.

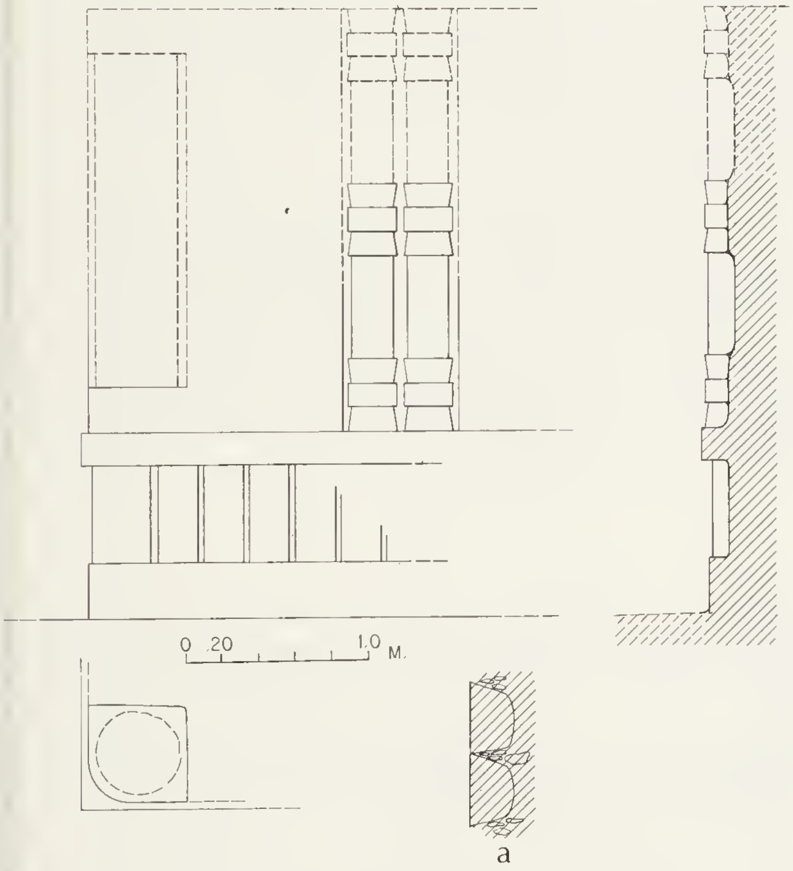


Figure 376. Kabah, Structure 2C7. Restored elevation of base molding and lower wall zone at corner, section between split columns, and plan of attached column at corner: a, section of wall facing stone.

Additional room at south seems clearly to have been contemplated to give balanced plan to structure. No building platform and base molding there, just a heap of rough fill. South face of transverse wall, which is currently an outer face, carries wall stone of variety used for inner wall facing. Also, no sign of three-quarter columns employed on other corners of structure.

Although roof of perishable materials or stone robbing might account for small amount of debris in and around building, limited size of substructural platform, unfinished nature of south end of building, and apparent absence of vault and molding stones in debris lead to conclusion that structure was never finished, and that walls stood only to height of, but not including, medial molding.

GROUP OF STRUCTURE 3B1

This southernmost group on the map (fig. 281) lies at the southern end of the system of causeways that terminates at the Group of Structure 1B2 at the north. Like the northern group, the southern assemblage is dominated by a pyramid temple, Structure 3B1, which faces north directly at the larger temple, Structure 1B2. The main approach to the southern group is quite clearly from the north, where a series of broad steps or terraces rises from the causeway to the court in front of Structure 3B1.

I have almost no notes on the substructural terracing and low platforms that make up this architectural assemblage. Although the map shows no contour lines, I suspect that the group rests on a natural rise. Court level is several meters above the causeway, as indicated by the flight of steps or terraces that lead up to the closed courtyard. All of the structures shown on the plan (fig. 281), with the exception of the main pyramid and the mound at the northwest corner of the court, are low platforms only some .30–.50 m high. The northwest mound is several meters in height, and the pyramid rises some 10–12 m above court level. All structures are in deplorable condition.

Four altars, A22–25, lie in the courtyard before Structure 3B1, three at the foot of the pyramid's stairway, the fourth a short distance west (see Monuments, below).

Structure 3B1

Almost no details of pyramid, stairway, or temple building are visible without excavation.

SUPERSTRUCTURE

Plan. See figure 281. Only walls of front central room, with a doorway in front wall and another in rear wall, can be seen. I suspect that plan is like that of Structure 1B2 (fig. 312), but not necessarily with so narrow a rear room.

Base Molding. Plain molding of single course of stone as is customary on pyramid temples (see fig. 313a).

Walls and Doorways. Walls about .65 m thick. Wall stone and jamb stones large, finely dressed, and characteristic of better variety of masonry.

MISCELLANEOUS SCULPTURE

M1. Crude human figure of stone with snake draped over shoulders and behind neck. Badly weathered and part of face broken off (see E. W. Andrews 1939, pl. 2a, b). Sculpture measures 1.34 m high, .94 m maximum width, .32 m thick.

Located near southern edge of Quadrangle 1B (see fig. 281) in small court, bordered at north by low platform across causeway leading to Group of Structure 1B2. Figure faced south when found by me but probably not *in situ.* Altar 8 in front of statue.

Sculpture first mentioned by Carrillo (1846) who connects it with the name Kabah in his tortured derivation of that name (see Etymology, above). Maler (n.d., p. 20) associates the name Kabahaucan with the statute, which he photographed (see Zayas 1908, p. 187, for Maler photo). See E. W. Andrews 1939, pp. 74–79, and 1943, pp. 82–87, for description and discussion of sculpture.

M2. Human head of stone apparently broken from larger figure. Terribly weathered and features virtually obliterated. I have no measurements for this piece. My memory is that the head is approximately life size.

Found on low platform behind (north) M1 (see fig. 281), and obviously not *in situ.*

M3. Stone sculpture that seems to portray bird (fig. 377a, b). Hole runs longitudinally through body, and assume head was tenoned into this aperture. Figure measures .50 m high, .42 m maximum length, .27 m wide.

Found in closed court that also contains Stela 1 and Altars 9 and 10 (see fig. 281). Sculpture associated with no building and seemingly not *in situ.*

M4 and 5. Two stone heads that are virtual duplicates. The first (fig. 377c; and see Willard 1933, p. 385) was in the caretaker's house in the ruins at the time of my work (1935); the other (fig. 377d; and see Pijoan 1946, fig. 764) is in the Museum of Archaeology in Merida. The latter measures .48 m high, .54 m deep including tenon at rear, .29 m wide at top, and .31 m at base.

Heads reported by Gann (1924, p. 240) as found in the ruins, and illustrated (ibid.) resting on the base molding of the west facade of Structure 2C6. As the sculptures are far too heavy to be carried about readily, it may be surmised they were found not far from the location shown by Gann. They may have been a part of the facade decoration, but that is pure conjecture.

Legend with head (M5) in museum reads in part: "Beautiful head of a personage of very peculiar type. Note the aquiline nose and the mustache, the long face and ample forehead. The headdress carries a little mask whose profile is a perfect representation of cranial deformation. The coiffure on one side shows straight hair, on the other with nodules. The left side of the face displays a decoration that has been described as representing tattoo. The mastery of the carving and the physical characteristics recall the head of the so-called 'Queen of Uxmal' . . . [see p. 267, M46]. This head probably had incrustations of a different material in the eyes. . . ."

Note the extraordinary resemblance of these heads to several of the figures portrayed on the doorjambs of Room 21 in Structure 2C6 (figs. 372, 373). For further comment see Pijoan 1946, p. 475; and Willard 1933, p. 387.

M6. Human head of stone with tenor at rear (see Pijoan 1946, fig. 762). Badly weathered but carving seemingly portrays a somewhat grotesque face with fat cheeks and heavy brow ridges. Head is .21 m high, .16 m wide, and .20 m thick including tenon.

Specimen in Museum of Archaeology in Merida and labeled as coming from Kabah.

M7. Human head of stucco with remains of headdress on right side and pointed, protruding upper lip (see Pijoan 1946, fig. 763). Measures .30 m high by .25 m wide.

Specimen in Museum of Archaeology in Merida and labeled as coming from Kabah.

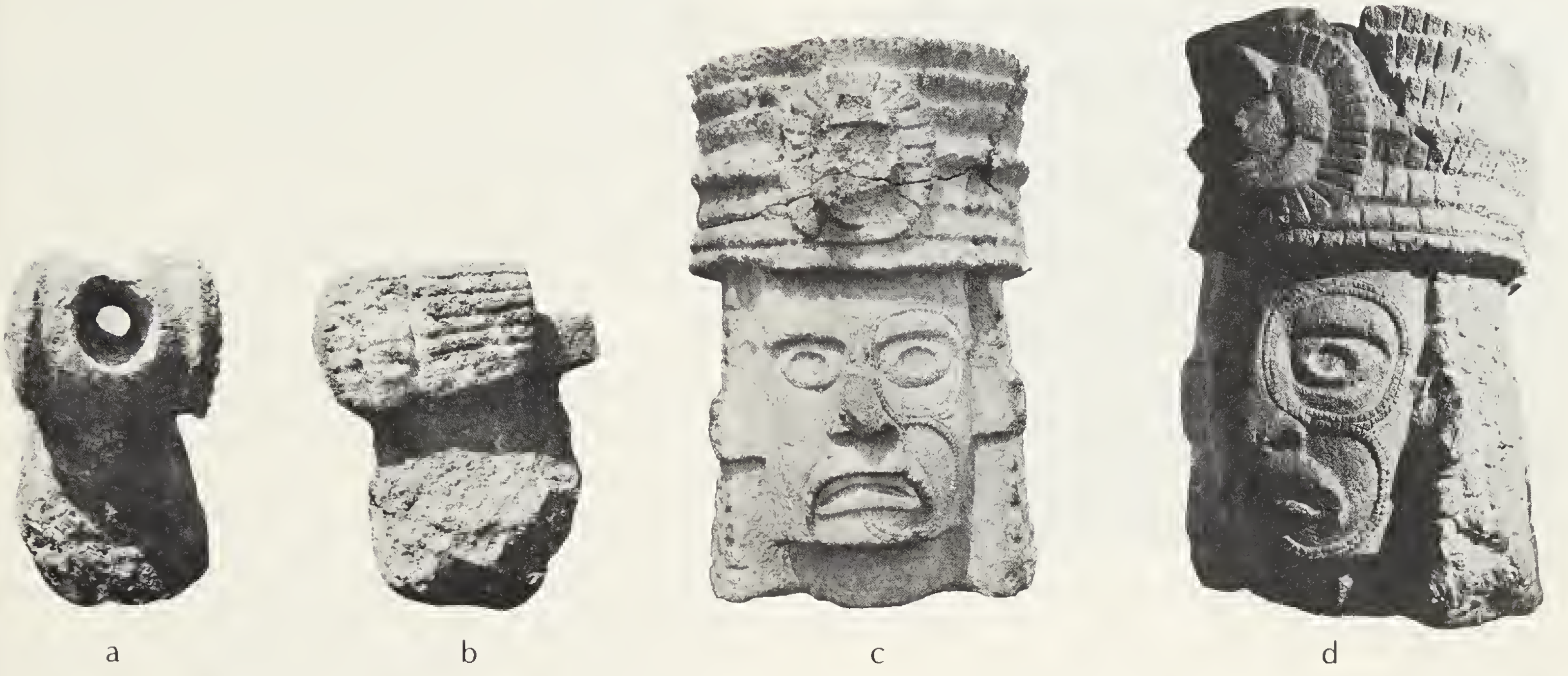


Figure 377. Kabah. Miscellaneous sculpture: a, M3, sculpture of bird (?) lacking head, front view; b, M3, side view; c, M4, stone head; d, M5, stone head.

MONUMENTS

STELA

Stela 1. Plain (fig. 378). Height 1.46 m; width .56 m at bottom, .24 m at top; maximum thickness .30 m.

Located on low platform in front (south) of north range of quadrangle that also holds Altar 9 and Miscellaneous Sculpture 3 (see fig. 281). Stela presumably faces south.

Extremely crude roughly-shaped stone. Nevertheless, its situation on its own platform in front of building and its upright position indicate stone to have been stela.

Small upright stone standing .40 m above debris—.39 m wide, and .15 m thick—located just west of Stela 1. Roughly shaped. May also have been stela, but too questionable to label it as such without excavation.

ALTARS

Twenty-six altars were observed at Kabah, 25 of which are shown on the map (fig. 281). Somewhat like the situation at Sayil, a high proportion of the altars (12) are associated with the pyramid-temple groups (Strs. 1B2, 3B1) at each end of the north-south system of causeways, or are located near those roads. The major architectural complex of the East Group (Strs. 2C1–6) also has a number of altars (6), as might be expected. Surprisingly, the Northwest Group (Strs. 1A1, 2) and the West Group (Strs. 2A1–3), both important assemblages, each has only one altar. As mentioned in connection with Sayil, there undoubtedly are other altars at Kabah that for one reason or another we did not find.

Seven of the altars are carved, and an eighth is too weathered to be certain if it once carried carving or not. I have notes or measurements on 16 of the monuments (see below). What was said about drum and column shapes at Sayil is true at Kabah, but it may also be noted that figure carving (Altars 3, 4, 8, 25) is confined to column altars where the height is only moderately greater than the diameter, whereas on those altars whose height greatly exceeds their diameter (Altars 15, 19, 20)—sometimes called *picotes*—carving consists of simple intertwined bands or geometric decoration.

Altar 1. Plain (fig. 382a). Height 1.35 m; diameter at top .70 m, at bottom .55 m.

At east side of small platform, from which it probably tumbled, near center of great terrace in front of Structure 1A2 (fig. 281).

I have no notes other than measurements on this typical column altar.

Altar 3. Carved (fig. 379; and see Proskouriakoff 1950, fig. 93a). Height approximately 1.20 m, diameter at top .75 m.

At foot of stairway to Structure 1B2. Broken into two pieces. Lower part, upside down, with carved side facing north and resting at foot of stairway to low platform in front of pyramid (see fig. 281). Upper part, right side up, with carved side facing south and resting on low platform at foot of main stairway to pyramid. Because upper part is on platform, assume this to have been original location of altar (fig. 312).

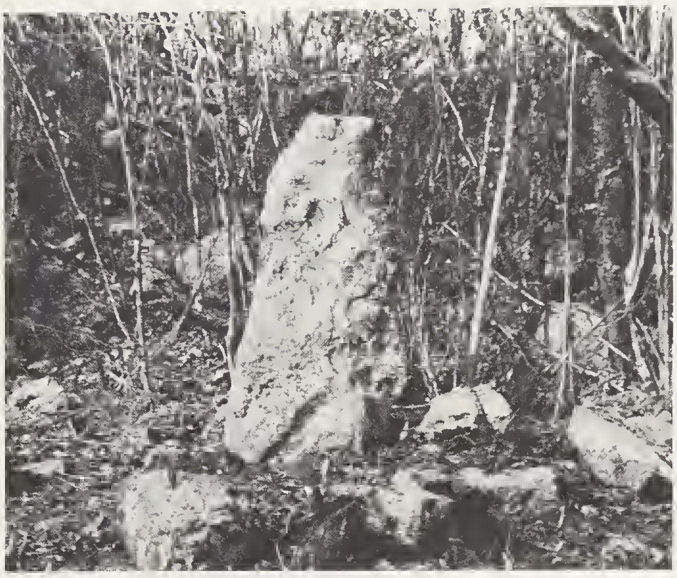


Figure 378. Kabah. Stela 1, looking north.

Column altar carved on one side with band of hieroglyphs across top of carved area. Upper edge of uncarved part of altar broken off, and central part of carved panel missing. Upper part of carving badly weathered. What is left of lower part of carving somewhat less weathered. For further comment see Proskouriakoff 1950 (p. 165).

Altar 4. Carved (fig. 380; and ibid., fig. 93c). Height .70 m; diameter at top .48 m, at bottom .40 m.

Although monument is shown resting on small independent platform before Structure 1B2 (figs. 281, 312), altar actually found lying between that platform and stairway to low platform at foot of main stairway to pyramid. Resting with carved side up and top to north. May have fallen from either platform.

Column altar with carved panel on one side. Only small portion of edges broken off, but carving so weathered as to show few details (see Proskouriakoff 1950, p. 165).

Altar 5. Plain. Diameter approximately .60 m.

Lying south of small independent platform in front of Structure 1B2 (fig. 312), and may originally have been located on platform.

Altar badly broken. I have no measurement of height and do not know if this was a drum or column altar.

Altar 8. Carved (fig. 381; and ibid., fig. 93b). Height 1.01 m; diameter at top .77 m, at bottom .65 m.

Standing few meters south of Miscellaneous Sculpture M1 (which see, and fig. 281), where it was observed by Maler (n.d., p. 20) many years ago. Carved side of altar facing south but questionable whether monument is *in situ*.

Column altar in very bad condition. Most of uncarved side broken away and some of sculpture gone at left side of panel. Upper edge of carving cracked away and all carving badly weathered. Two subsidiary and two main figures visible. Impossible to know how much carving is missing at left, but border at right shows part of altar was

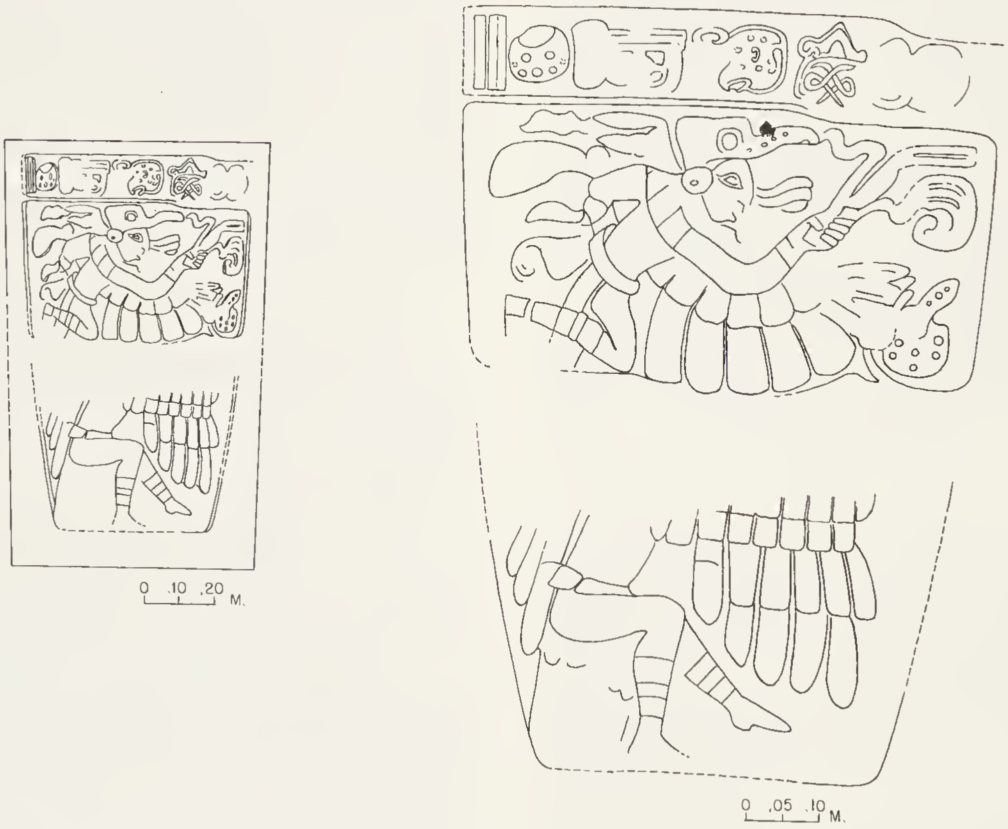

0 .10 .20 M.
0 .05 .10 M.

Figure 379. Kabah. Altar 3, profile and bas-relief.

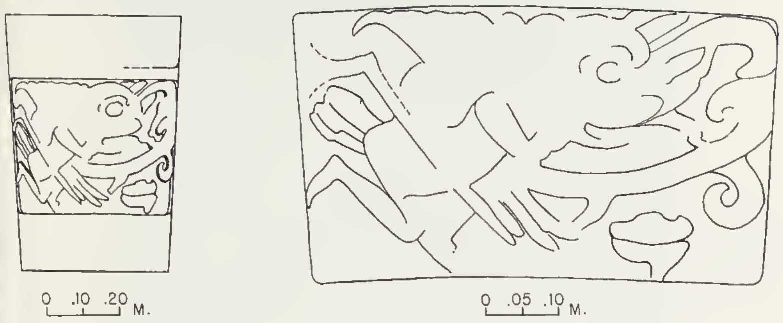


Figure 380. Kabah. Altar 4, profile and bas-relief.

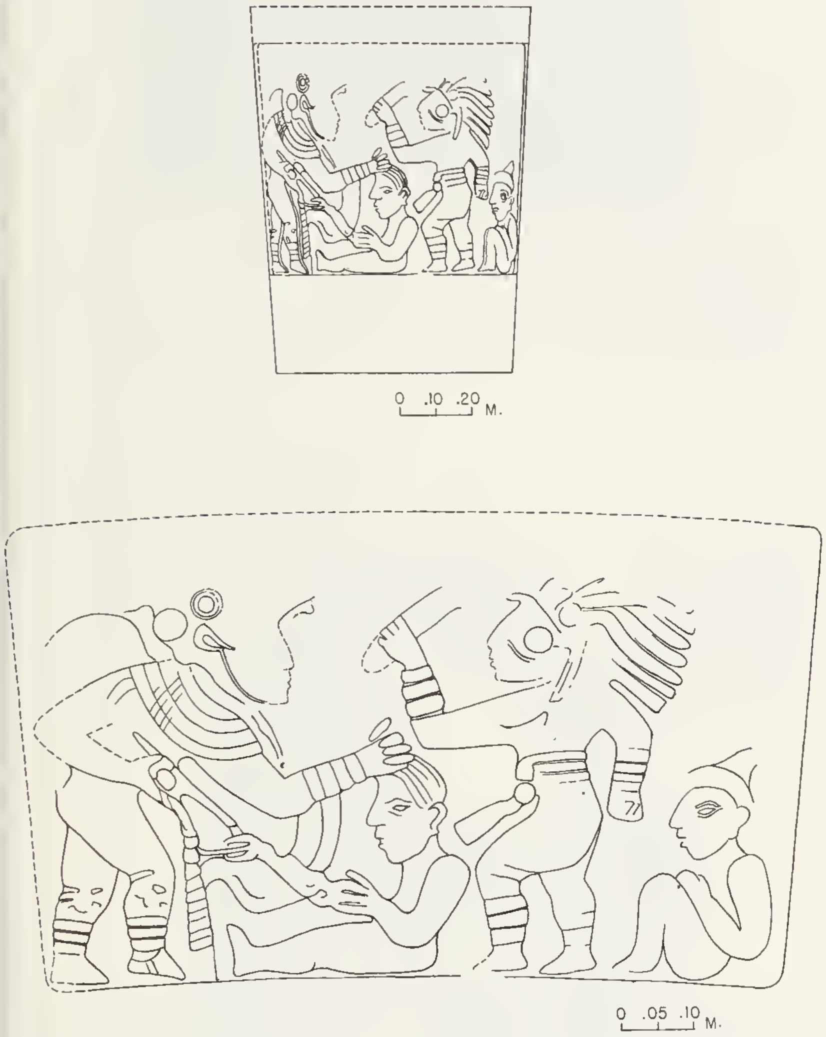


Figure 381. Kabah. Altar 8, profile and bas-relief.

not sculptured. Seems once to have been fine piece of sculpture (see Proskouriakoff 1950, p. 165).

Altar 9. Probably plain (fig. 382b). Height .63 m; diameter at top approximately .95 m, at bottom approximately .86 m.

Near center of court formed by quadrangle that also holds Stela 1 and Altar 10 (fig. 281). Found resting upside down.

Well-shaped and dressed drum altar with slightly rounded edge at base. Apparently without carving, but so much of upper edge cracked away that monument may possibly have carried a band (see Altars 15, 19, 20, below). Also conceivably was carved on side that is now gone, but probably not.

Altar 11. Plain (fig. 382c). Height .62 m; diameter at top .66 m, at bottom approximately .52 m.

Resting on debris of stairway to second story of Structure 2A1 (fig. 322). Lying on side, top of altar to west. Position on slope of stairway indicates monument fell from above, possibly from stair landing or from platform in front of second story.

Typical, well-worked drum altar.

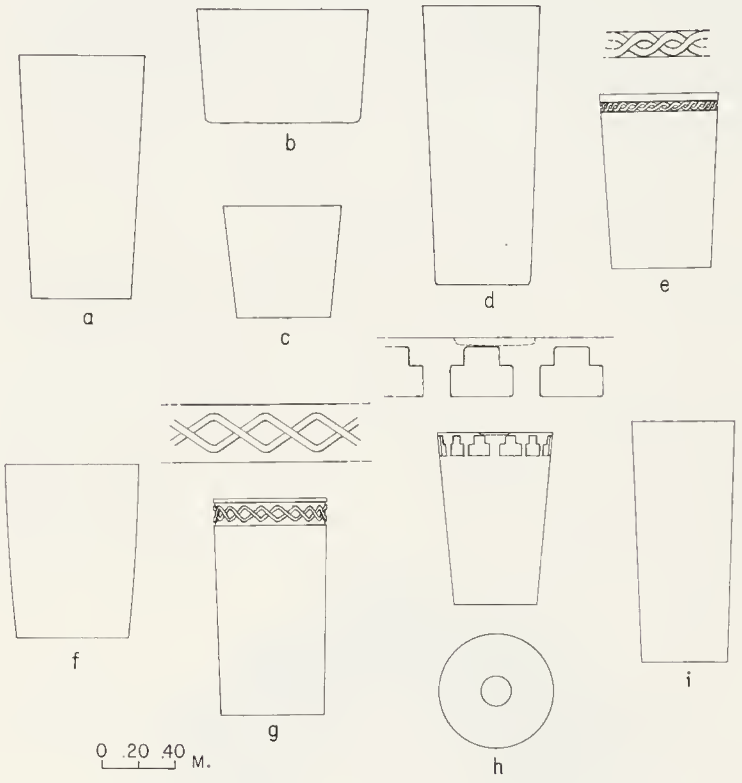


Figure 382. Kabah. Profiles of altars 1, 9, 11, 14, 15, 17, 19–21: a, Altar 1; b, Altar 9; c, Altar 11; d, Altar 14; e, Altar 15, and detail of carving; f, Altar 17; g, Altar 19, and detail of carving; h, Altar 20, with detail of carving and plan of top; i, Altar 21.

Altar 14. Plain (fig. 382d). Height 1.55 m; diameter at top .65 m, at bottom .53 m.

Resting on low platform (not shown on map or plan) just west of court in front of Structure 2C6, but not centered on stairway to court (fig. 338).

Typical well-cut and dressed column altar of the *picote* variety. Charnay (1887a, p. 381) reports a "picote," which was not found by us, at the center of the court before Structure 2C6. Conceivably, Altar 14 is this monument, fallen from above (but see Altar 14A, below).

Altar 14A. Plain. Height approximately 1 m; diameter approximately .80 m.

Altar not shown on map or plan. My notes locate monument near Altar 14, in debris from substructural wall of court in front of Structure 2C6 (fig. 338). Monument may have fallen from above.

Column altar that also might be the "picote" referred to by Charnay (ibid.) although it is not of typical picote proportions.

Altar 15. Carved (figs. 382e, 383). Height .97 m; diameter at top .66 m, at bottom .55 m.

Found on low platform west of Court of Structures 2C1–4 (figs. 281, 339). Lying on its side.

Column altar with large natural cavity, presumably once filled with mortar, in one side. Intertwined bands that circle altar near the top form only decoration. Upper edge and decorative band broken off about one-third of circumference of altar, and band badly weathered on another one-third of circumference. Last one-third of altar, representing side that rested on ground, well preserved (fig. 383).

Altar 16. Plain. Height approximately 1.01 m; diameter at top approximately .62 m, at bottom .52 m.

Lying just west of small platform at center of Court of Structures 2C1–4 (fig. 339). Probably once stood on small platform.

Column altar broken into two large pieces and good deal of upper edge missing. Stone seems not to have been faced on bottom (buried?), but otherwise well cut and dressed. This undoubtedly is the picote mentioned and illustrated by Stephens (1843, 1:397), at the time of whose visit it seems to have been unbroken, and later mentioned by Charnay (1887a, p. 382).

Altar 17. Plain (fig. 382f). Height .96 m; diameter at top .74 m, at bottom .62 m.

Located near northern border of court, south of Structure 2C3 (fig. 281). Just off substructural platform of Structure 2C3 but centered on that building.

Column altar with slight curve, or entasis, on sides. Faced on bottom as well as top and sides.

Altar 19. Carved (fig. 382g). Height 1.20 m; diameter at top .63 m, at bottom .57 m.

Lying on side at east edge of small platform west of long mound just west of Structure 1C1 (fig. 281). May have fallen from small platform.

Column altar with decorative border at top. Interlaced bands have angular pattern that suggest plaiting rather than twining.

Altar 20. Carved (fig. 382h). Height .96 m; diameter at top .64 m, at bottom .46 m.

Lying on side next to Altar 19 (see above).

Column altar with decorative border of step design at top. Altar unusual in having shallow basin carved in top.

Altar 21. Plain (fig. 382i). Height 1.34 m; diameter at top .57 m, at bottom .48 m.

Although shown on small platform in front of Structure 2C7 in plan (fig. 374a), altar actually found lying on side just north of platform. Seems to have fallen from platform.

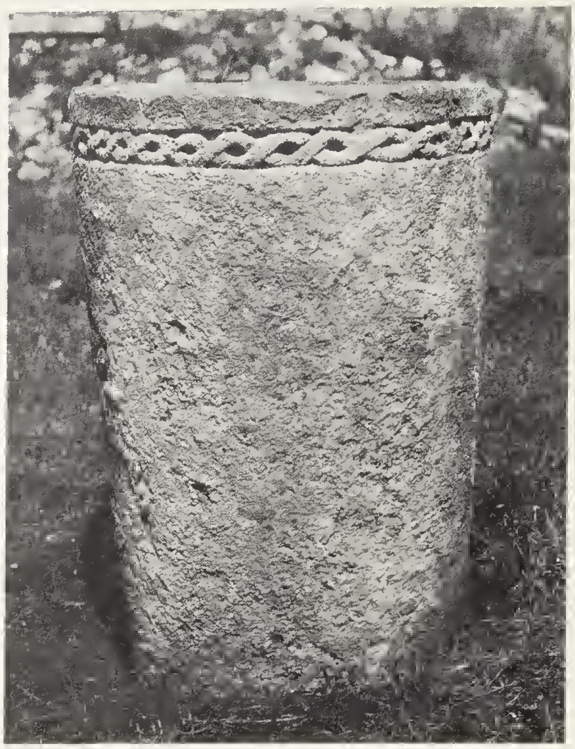


Figure 383. Kabah. Altar 15 (cf. fig. 382e).

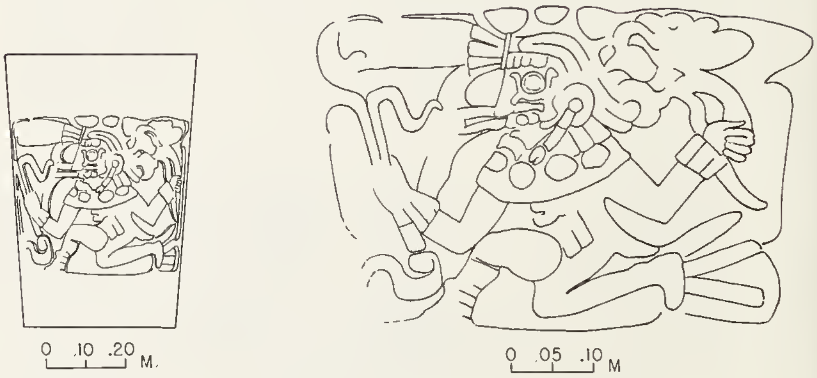


Figure 384. Kabah. Altar 25, profile and bas-relief.

Well-cut column altar. Presence of altar and small masonry platform before building that was never finished raises question of time of dedication of structure (see Structure 2C7 for discussion).

Altar 25. Carved (fig. 384; and see Proskouriakoff 1950, fig. 93d). Height .68 m; diameter at top .48 m, at bottom .38 m.

Lying on side, with top to east, at foot of stairway to Structure 3B1 (fig. 281). Two plain altars nearby, and a third a short distance west.

Column altar with sculptured panel on one side. Carving rather weathered, but possible to make out a squatting human figure or deity (see Proskouriakoff 1950, p. 165).

OTHER SITES

Santa Ana, near Kabah

Approximately 5 km east of Kabah.

Pyramid reported by Charnay as being destroyed (as of 1882) to provide material to repair Hacienda Santa Ana nearby. "Square pillars . . . topped by Doric capitals" in the debris.

REFERENCE

Charnay 1887a, p. 378.

Tabi

Approximately 15 km east of Kabah, the same distance north of Labna, and some 10 km west and a bit south of Oxkutzcab.

There is considerable confusion concerning the site, or sites, of Tabi. Stephens (1843, 2:62) mentions carved stones in the walls of the hacienda of Tabi, from which the ruins take their name, and badly ruined buildings nearby. I assume that this is the site, called by Morley (1937–38, 4:262–263) Tabi II, from which comes the large sculpture (fig. 385) or stela formerly at the hacienda (see Gann 1924, pp. 237–238) but now in the Museum of Archaeology at Merida. What I take to be a different site is called Tabi I by Morley (ibid.), but is identified as Xcoralche on Maler photographs of three stelae, and is labeled Tabi on casts of two stelae, both of them shown in the Maler photographs, in Peabody Museum of Harvard University. Xcoralche seems almost surely to be the ruins known nowadays as Pich Corralche (see below). To confuse the situation further, Hissink (1934, p. 51), referring to an unpublished manuscript of Maler's, mentions building remains at the site of Tabi Xlabpak (see Pollock 1970, fn. 16). I think we can assume that the ruins near Hacienda Tabi, mentioned by Stephens and called Tabi II by Morley, form a site distinct from Pich Corralche (or Xcoralche). It is the former I am calling Tabi. Whether Maler's ruins of Tabi Xlabpak represent that site or even a third location, I do not know.

REFERENCES

Stephens 1843, 2:62.
Gann 1924, pp. 237–238.
E. W. Andrews 1939, pp. 76–79.

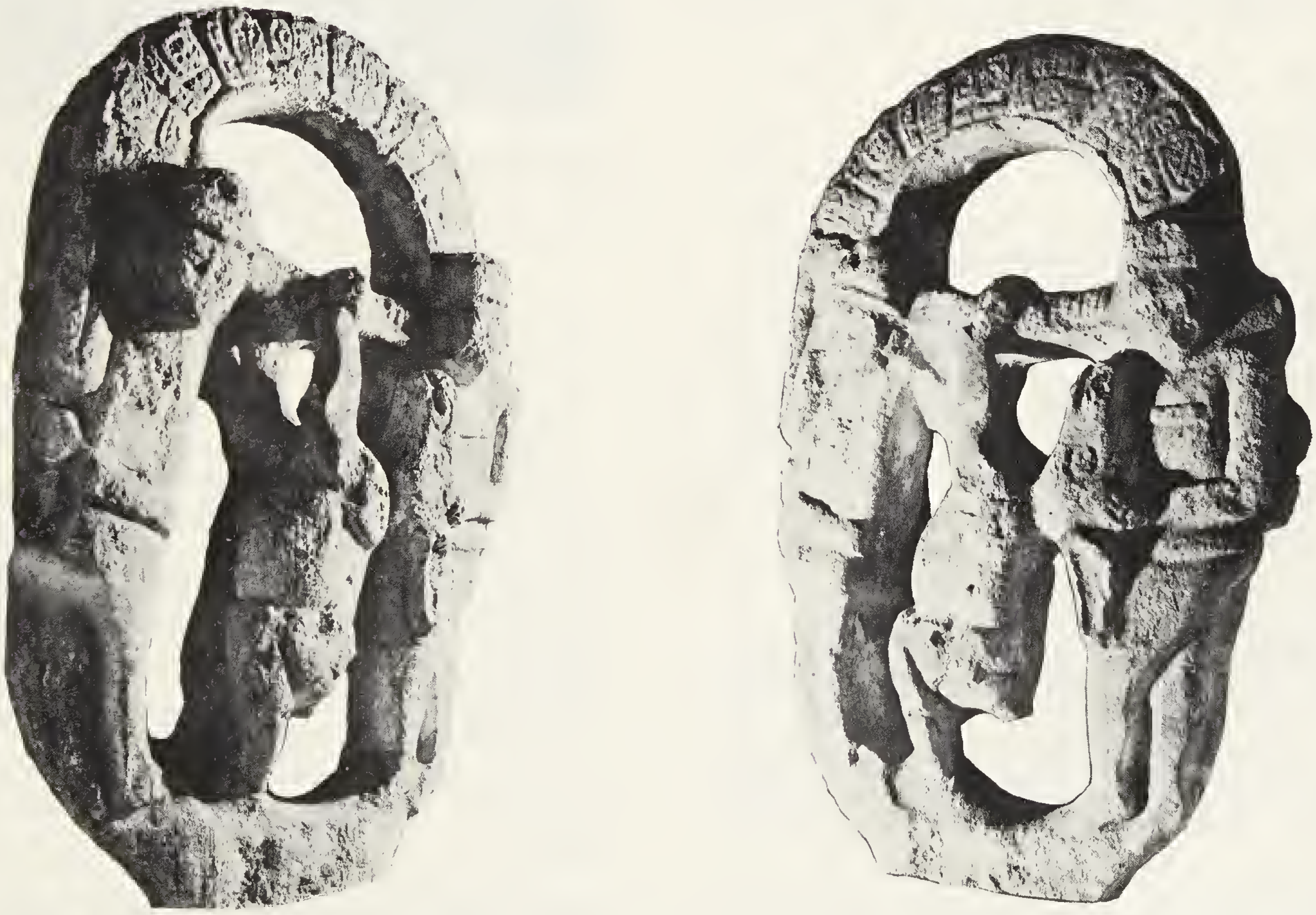


Figure 385. Tabi. Large sculpture or stela.

Pich Corralche
(Xcoralche, Xcanalchen, Tabi)

Twelve or 13 km west of Oxkutzcab and 3 or 4 km northwest of Tabi.

The confusion between this site and Tabi has been mentioned above (see Tabi). My diary (1935) notes "two whopping big mounds at Pich Corralche, one apparently with a standing building." The mounds were viewed from the road (west side) but were not visited. In a copy of Case's (1911) *Views on and of Yucatan* that I saw many years ago there was a note by Teobert Maler that the lower of the two photographs facing page 216, labeled Xcanalchen in the book, was "Xcoralché-Resto de la Fachada de uno de los Edificios mayores.-T.M." The picture shows a doorway with a single central column, corbels, stone lintels, a simple rectangular medial molding rising over the doorway, and a diamond pattern over the lintels and beneath the molding.

The site is mainly known from Maler's unpublished photographs of stelae and from casts of two of the stelae now in Peabody Museum of Harvard University (fig. 386). Spinden (1913, p. 201) says the casts were made by Charnay. Morley (1937–38, 4:262–263) refers, I do not know on what authority, to "the three sculptured stelae found by Maler at a site called Tabi (I). . . ." I believe these are the Pich Corralche (or Xcoralche) stelae that are seen in the Maler photograph shown here (fig. 387). I am indebted to Mr. Ian Graham for this previously unpublished photograph.

REFERENCE

Proskouriakoff 1950, p. 163.

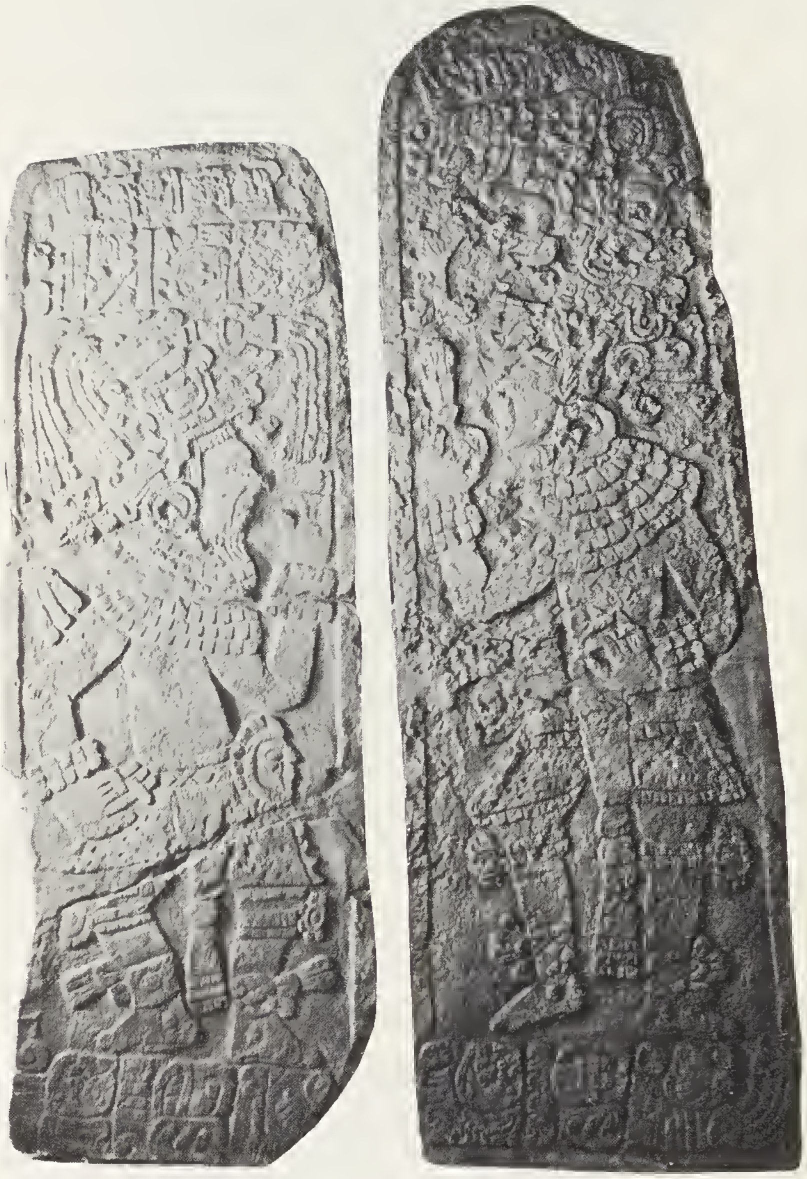


Figure 386. Pich Corralche. Stelae: casts in Peabody Museum, Harvard University.

Santa Rita, near Oxkutzcab

Approximately 8 km west of Oxkutzcab.

Ricketson and Blom (1924–25) index of ruins reports several buildings and an inscription on a stone lintel at Hacienda Santa Rita. Direccion de Antropologia, Secretaria de Agricultura y Fomento, Mexico, cited as source of this information.

Chumul

Shown on Tulane University (1940, sect. 2) map of ruins some 8 km west-southwest of Oxkutzcab and about 3 km east of Tabi. Mercer (1896, p. 76) locates site 3 miles (approx. 5 km) south of Tabi in caption to his figure 29.

Mercer reports five "cisterns," undoubtedly chultuns, near one or more mounds.

REFERENCE

Mercer 1896, pp. 76–77.

Oxkutzcab

Town on railroad about halfway between Ticul and Tekax.

Although the modern town seems to have its origins in early colonial times (see Roys 1957, pp. 72–73), there had unquestionably been an ancient aboriginal settlement at Oxkutzcab. E. H. Thompson (1904, p. 4) and Case (1911, p. 114) report mounds, ruined buildings, and much reused stone in colonial and modern buildings.

REFERENCE

E. H. Thompson 1904, pp. 4–7.

Techoh
(Tecoh)

Approximately 2 km southeast of Oxkutzcab.

Site is shown as ruin on Tulane University (1940,

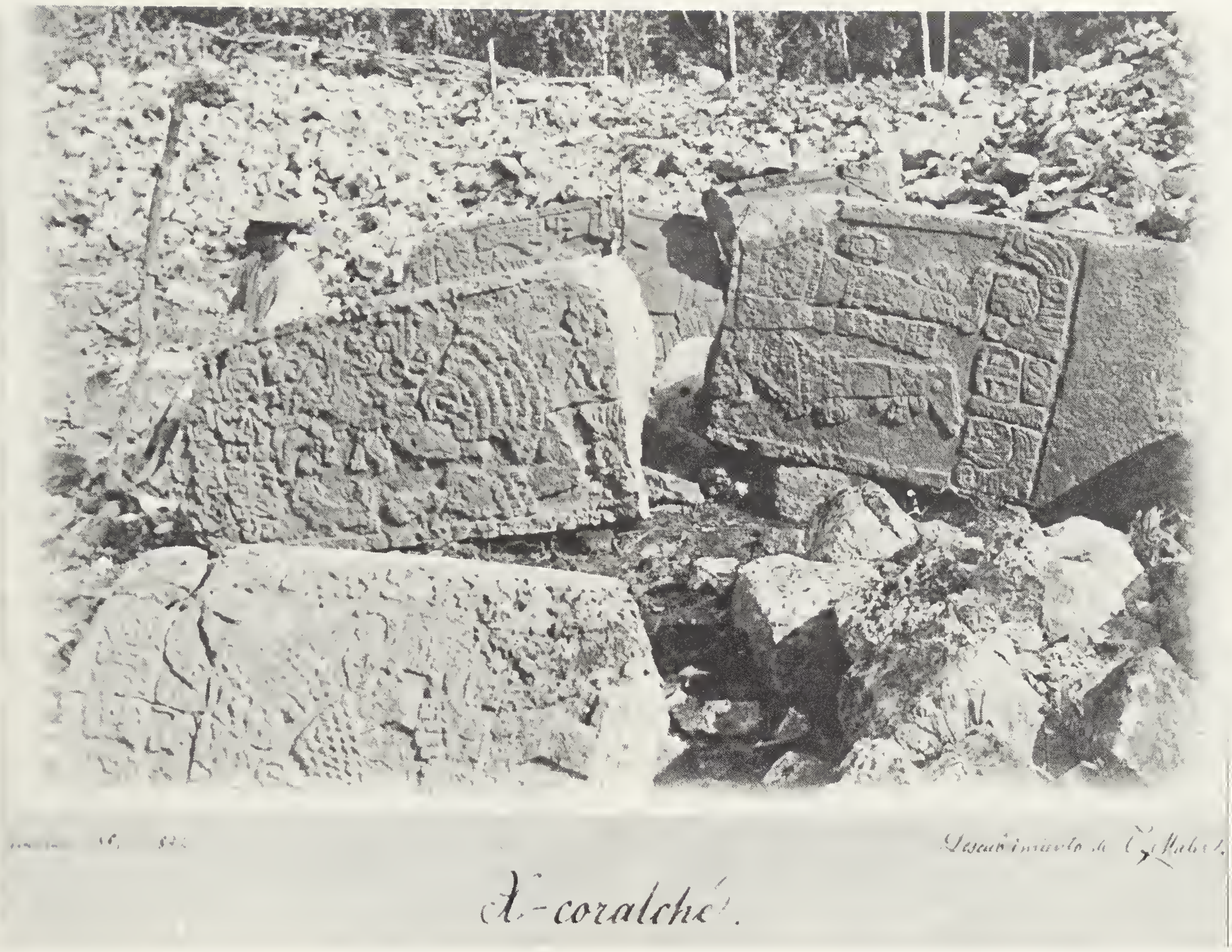


Figure 387. Pich Corralche. Stelae (Maler photograph). Middle and rear stelae are those in figure 386.

sect. 2) map and on Roys (1943, map 4) map of the Xiu area. The name comes, I believe, from a hacienda at that location. I have no information on the ruins.

Xampon

(Xkampom)

Approximately 12 km west of Kabah.

Stephens (1843, 2:124) describes a large quadrangle whose buildings remain standing only at two corners. His illustration (ibid.) of one corner and a Maler photograph (Case 1911, p. 216; Totten 1926, pl. 65:2) of what seems to be the other corner show typical classic Puuc architecture with stone door lintels, a three-member medial molding with the common zigzag-and-triangle decoration in the middle member, and banded colonnettes in the upper wall zone.

REFERENCE

Stephens 1843, 2:124.

Hiokowitz

Shown on Tulane University (1940, sect. 2) map some 17 km west of Kabah and about 4 km west of Xampon.

Site seen at distance from Xampon by Stephens (1843, 2:124) but not visited. I have no information on the ruins.

Kuepak

Shown on Tulane University (1940, sect. 2) map about 2 km south of Hiokowitz (see above). Case (1911, p. 98) says 5 km southeast of Uxmal and same distance south of Nohcacab (Santa Elena), an impossible location.

Ruins seen at distance from Xampon by Stephens (1843, 2:124) but not visited. I have no information on the site.

Xkalupococh

(Kalupok, Xkalumpococh)

Tulane University (1940, sect. 2) map places site some 17 km west of Kabah and just south of Hiokowitz and Kuepak (see above). This location does not seem to agree with Maler (1902, p. 215), who places ruins just west of road from Santa Elena Nohcacab to Bolonchenticul and about 17 km from Santa Elena. This would locate site considerably east and somewhat south of place shown on Tulane map. As Stephens (1843, 2:124) saw the three ruins of Xkalupococh, Hiokowitz, and Kuepak from Xampon, the two latter sites may well lie farther east than shown on the map.

Maler (1902, pp. 215–216) described three groups of buildings that he visited in 1889 and 1895. At that time there was architecture standing at each group, which Maler described in some detail, and he illustrated (ibid., fig. 13) the main facade of a building in the middle group. The two-room building is an example of typical classic Puuc architecture with banded-facade columns, moldings with colonnettes, and step-and-fret decoration in the upper wall zone. The rear of this same building is shown in what is presumably a Maler photograph published by Case (1911, facing p. 212) and by Totten (1926, pl. 65:1). Here the moldings are of slightly different style, and the upper wall carries groups of two banded columns separated by a vertical line of triangles. The western end of the building was never completed, indicating that additional rooms were planned.

At a northern group Maler (ibid.) mentions another two-room structure more-or-less similar to the one just described.

The southern group, judging by Maler's (ibid.) account, was the most important. The principal building, which Maler refers to as a temple palace, was a structure of ten rooms built around a solid central core. On the east side a stairway mounted over a half-vault to the upper platform, but the obviously contemplated second story was never built. The three eastern rooms of this structure were older than the rest and represent an earlier building. Maler's description of the moldings and upper-facade decoration suggests typical classic Puuc architecture. Nearby stood a two-room structure with "a sloping frieze of simple, severe form."

REFERENCE

Maler 1902, pp. 215–216.

Uxmal

This is the greatest and most famous of all Puuc ruins. Unlike the vast majority of ancient Maya settlements, the site of Uxmal never entirely disappeared from history. The old city and its ruined buildings are mentioned in the native chronicles and in other early Maya and Spanish documents (see Saville 1921, pp. 62–84), and the fame of the site attracted some of the earliest explorers of Maya ruins. In more recent years the ruins have, as might be expected, been the focus of considerable archaeological excavation and study.

At the time I carried out the work reported in these pages (1936), the Mexican Government, through the agency of the Instituto Nacional de Antropologia e Historia, was just beginning its long program of excavation and architectural restoration at Uxmal. Our permission to work at the site excluded detailed study of structures selected by the Government for their own future attention. Quite naturally, they were interested in the large, relatively well-preserved buildings, namely, the Nunnery Quadrangle, the House of the Magician, the House of the Turtles, and the Governor's Palace. This restriction resulted in my giving attention primarily to the lesser, often outlying, and generally less well-known buildings and groups of buildings, one exception being the immense House of the Pigeons Complex. I did, moreover, with the permission of the Mexican Government, take cursory notes on the large structures just mentioned as reserved for their investigations.

ETYMOLOGY

No satisfactory meaning of *Uxmal* has been found. The late R. L. Roys wrote me that an attempted explanation is *ux,* three, in Chontal and Chol; *mal,* times or passed, in Yucatec Maya (but apparently not in Chontal or Chol). The definition was unconvincing to Roys (1935, p. 4). Charnay (1887a, pp. 394–397) says that "tradition derives the name of Uxmal from a word meaning 'thrice built.' " Uxmal is a truly old place-name that appears in several early documents.

SITUATION

Latitude 20°21′40″ N, longitude 89°46′20″ W (but see Pollock 1970, p. 66 and fn. 11). Approximately 18 km northwest of Kabah, 20 km west of the town of Ticul, and 15 km south-southwest of the town of Muna.

TOPOGRAPHY

Generally level plain, broken only by low outcroppings of bedrock, and somewhat higher but nevertheless low hillocks that often serve as building sites.

WATER SUPPLY

Number of ponds, or aguadas, in vicinity of ruins. Tulane map of Uxmal (fig. 388) shows three of them, and Blom (1934, p. 59) reports several more just off the map to the east. Stephens (1843, 1:249–259) saw the large aguada just west of the ruins and was told there were many more like it. Brasseur (1867, pp. 256–265, 284–285), who writes at some length and at times somewhat fancifully about the ancient water supply of Uxmal, shows seven aguadas on his plan of the ruins (ibid.) and says there were others to the east. There is some question concerning the natural or artificial character of these aguadas. Stephens (1843, 1:250) was told they were artificial, and later in his journeys obtained good evidence to that effect (1843, 2:211–213, 224–228). Brasseur (1867, pp. 256–265, 284–285) borrows from Stephens and goes far beyond him in his assessment of the hydraulic engineering abilities of the ancient Maya. Erosa (1947, p. 6) and Marquina (1951, p. 767) report that a masonry floor was found in one of the Uxmal aguadas. There seems to be little doubt that some of these ponds were wholly or partly artificial in nature, but whether all were is open to question.

Numerous chultuns observed, a feature of the ruins noted by many writers on Uxmal (e.g., see sources referred to above). Permanent water now supplied by modern well at ruins. Colonial well at Hacienda Uxmal about 2 km to the north.

MAPS

Many maps of Uxmal have been published. The earliest I know of is that of Waldeck (1838, pl. 8). It is of little value. Most of the maps that have appeared are copies of, or are at least based on, the plan of Stephens (1843, 1:165), the one in Holmes (1895–97, pl. 8), being the best example. An early map that should be mentioned, although some of its features are suspect, is that of Brasseur (1867, p. 255), which covers a larger area than the Stephens's plan and shows quite a few more ruins.

The best map of Uxmal and its environs is the one prepared by Tulane University (fig. 388). A photographic copy of this map was given limited circulation many years ago, but so far as I know the map has never been published adequately until now (see Pollock 1970, fn. 12). A map that covers a smaller area than the Tulane survey is that of Morley (1956, pl. 49), also given by Erosa (1948, map), Kubler (1962, fig. 46), and Foncerrada (1965, pl. 2), which shows the large central structures in much more detail than the earlier map (fig. 389). The two are best used together.

SIZE

Central section of site, which is shown on Morley map (fig. 389), contained in area approximately 1 km north-south by .5 km east-west. Within this area lie all of major structures, some of which are huge. The ruins are judged to be the largest in the Puuc area more on the basis of massive construction than on areal extent.

Tulane map (fig. 388), which covers area of about 4 sq km, shows numerous outlying buildings and groups of buildings. According to Blom (1934, p. 58), these are only the larger structures "and no note was made of a multitude of minor mounds and groups of mounds which were seen during our search." It is known that ruins lie beyond the borders of the map, and the question again arises where to limit any site.

CIVIC PLAN

Principal structures aligned along an approximately north-south axis formed by the North Group (Quadrangulo Noroeste), the House of the Pigeons Complex or South Group (see Blom 1934, p. 57), and the Chanchimez Group. Plan is comparable to those of Labna and Sayil, but central causeway is apparently lacking. Location of Terrace of the Monuments (Las Estelas) along primary axis of ceremonial center another feature like Sayil (figs. 164, 389).

Although heart of city shows a fairly compact arrangement of buildings, particularly when the vast scale of construction is taken into account, site as a whole offers usual scattered pattern of buildings and groups of buildings, and mapping of Uxmal with detail seen on Sayil and Kabah maps would almost surely reveal a pattern similar to those sites. Strongly characteristic of Uxmal is the arrangement of structures around a court, often a completely enclosed court (Blom 1934, p. 59). These groups of buildings are for the most part isolated one from another, but contiguous and connected courtyards are present, notably in the North Group and in the House of the Pigeons Complex.

As noted above (see Size), since small constructions do not appear on the map, none of the typical domestic structures are shown. There is no reason to believe, however, that the concentration of such buildings does not equal that of Sayil and Kabah.

See G. F. Andrews, 1975, pp. 286–295, for further discussion.

Orientation. Usual wide variation in orientation of buildings, a variation that extends even to components of a single quadrangle or group. In accordance with customary Puuc practice, one axis of structure almost invariably lies somewhat east of north, the average deviation being about 17°.

DATES

Epigraphic. Both rings in the Ball Court carry hieroglyphic dates. These have been read by Morley (1918, pp. 272–274; 1920, pp. 511–515; Morley and Brainerd, 1941, p. 296) as:

East ring 11.15.16.12.14 10 Ix 16 Pop (A.D. 1277)
West ring 11.15.16.12.14 10 Ix 17 Pop (A.D. 1277)

Gann (1924, pp. 250–251) agrees with Morley in these readings, as does Spinden (1924, pp. 282–283; 1930, p. 37, fn. 1) except to change the Christian date to A.D. 1276.

J. E. S. Thompson (1937, pp. 193–194) suggests the following readings but labels both extremely questionable:

East ring 10.3.16.17.0 4 Ahau 18 Pop
West ring 10.3.16.16.19 3 Cauac 17 Pop

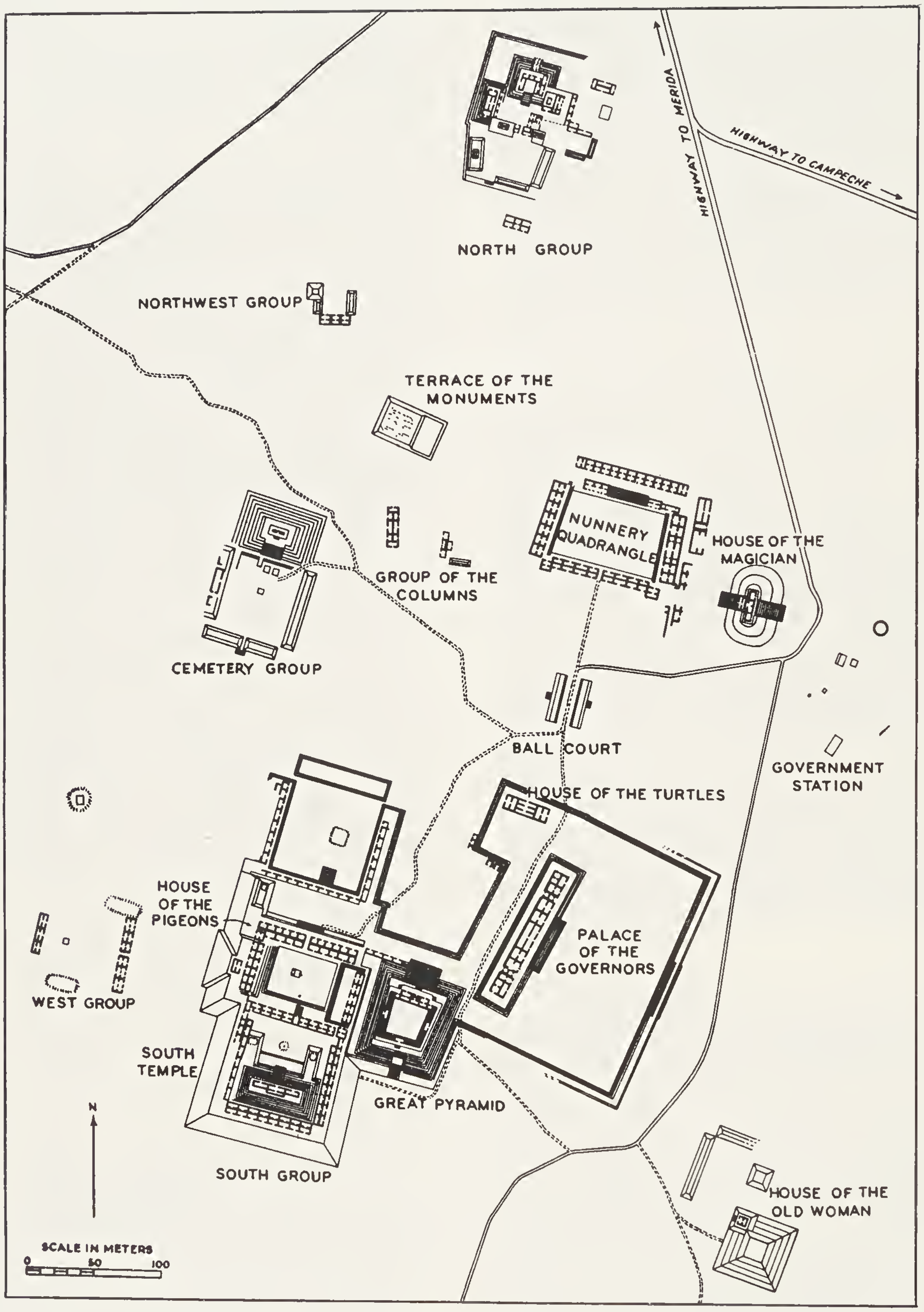


Figure 389. Uxmal. Map of central section of ruins (after Morley). Courtesy Stanford University Press.

Weitzel (1945, p. 30) accepts this reading, but uses a different correlation of the Maya and Christian calendars than that employed by Thompson. Proskouriakoff and Thompson (1947, pp. 146–147) have since changed the earlier readings to the following dates, which are accepted by Marquina (1951, p. 791):

East ring 9.10.16.6.14 9 Ix 16 Pop
West ring 9.10.16.6.15 10 Men 17 Pop

Beyer (1941, pp. 335–337) offers the following tun ending dates:

East ring 11.2.17.0.0 12 Ahau, 8 Kayab (A.D. 1280)
West ring 10.19.12.0.0 12 Ahau, 8 Muau (A.D. 1216)

Ruz (1958, pp. 644–650) suggests:

East ring 9.10.16.6.14 6 Ix 17 Pop (A.D. 649)
West ring 9.10.16.6.15 7 Men 18 Pop (A.D. 649)

and offers the alternative reading:

West ring 9.10.11.15.10 2 Oc 18 Pop (A.D. 644)

Foncerrada (1965, p. 49) accepts Ruz's date of A.D. 649.

Morley and Brainerd (1941, p. 296) write about the stelae at Uxmal:

> The inscription on one of the stelae surely begins with the day 12 Ahau; if this day corresponds to a katun ending, the most plausible assumption, the two most likely Long Count positions are: 10.17.0.0.0 12 Ahau 3 Yax (A.D. 1165), and 11.10.0.0.0 12 Ahau 3 Cumhu (A.D. 1421), the former being much more probable on historic grounds.

They do not identify the stela to which they are referring, but it may be Stela 4 (see below).

Proskouriakoff (1950, pp. 163–164) offers the opinion that Stelae 2 and 3 may date from the end of Cycle 9 or at the very beginning of Cycle 10.

In his description of the stelae at Uxmal, Morley (1970, p. 167) suggests that Stela 3 might carry one of the following dates:

10.18.8.0.0 4 Ahau 3 Zip
10.11.8.0.0 5 Ahau 13 Pop
11.4.8.0.0 5 Ahau 13 Chuc

He also offers (ibid.), but with little conviction, seven possible readings for Stela 4, the two most probable of which he considers to be:

10.16.7.0.0 12 Ahau 8 Mac (A.D. 1152)
11.9.7.0.0 12 Ahau 3 Zip (A.D. 1408)

Proskouriakoff (1950, p. 163) suggests a possible date for this stela of:

9.18.0.0.0

Morley (1970, p. 177) offers some highly tentative dates for Stela 14, as follows:

11.1.0.0.0 4 Ahau 8 Mol (A.D. 1244)
10.17.0.0.0 12 Ahau 3 Yax (A.D. 1165)
11.10.0.0.0 12 Ahau 3 Cumhu (A.D. 1421)

There are several painted capstones in the Nunnery Quadrangle (Blom 1934, p. 56), of which one carries hieroglyphs that may yield a date. Published sources dealing with this capstone are contradictory as to its provenience, but I believe it is found in the northwest room of the east range of the quadrangle. Morley (1918, pp. 273–274; 1920, pp. 510–513) reads the inscription as follows:

11.12.17.11.1 5 Imix 19 Kankin (A.D. 1219)

Gann (1924, pp. 249–250, 256) agrees with this reading, and so does Spinden (1920, pp. 379, 382; 1924, pp. 282–283; 1930, p. 37, fn. 1) except to change the Christian date to A.D. 1218.

Thompson (1941, pp. 106–108; 1945, p. 7; Proskouriakoff and Thompson 1947, p. 147) reads:

10.3.17.12.1 5 Imix 18 (or 19) Kankin (A.D. 905)

a reading accepted by Weitzel (1945, p. 30), although he adheres to a different correlation, as noted above.

Radiocarbon. There are three specimens of wood from Uxmal that have been dated by the radiocarbon method. The first of these comes from a lintel in the north range of the Nunnery Quadrangle and carries the date A.D. 885 ± 120 (de Vries, Barendsen, and Waterbolk 1958, p. 136; Vogel and Waterbolk, 1963, pp. 163–164; and see Kubler 1962, p. 162, fn. 38, for correct provenience). The north range of the Nunnery has a buried early facade, but I do not know from which part of the structure the specimen was taken.

The second specimen comes from a lintel in the lower west range of the House of the Magician, and is dated A.D. 570 ± 50 (Deevey, Gralenski, and Hoffren 1959, p. 165). Ruz (Mexico 1956a, pp. 5–7) reports this Lower West Temple to be the earliest structure now known of the several temples that are parts of this complex temple pyramid (and see Sáenz 1969).

The last specimen, which yields the date A.D. 740 ± 60 (Tamers 1969, p. 411), is described as, "Wood from portal of small structure directly behind pyramid 'La Divina' in Uxmal, Yucatan, Mexico." I think, but am not certain, that this means the sample is from a lintel in the House of the Birds (see p. 235).

Recent corrections of the radiocarbon time scale (Damon et al. 1974) indicate these dates, rounded off to the nearest decade, should be, respectively, A.D. 900 ± 130, 590 ± 50, and 760 ± 80.

Documentary. There are several references in the early native and Spanish literature that bear on the date of the ruins at Uxmal. In the *Book of Chilam Balam of Chumayel,* it is stated (Roys 1933, p. 145), "1544 was the year . . . eight hundred and seventy years after the town of Uxmal was depopulated, after the people were driven out of its towns." This purportedly establishes a date of A.D. 674 for the fall of the city. In close agreement with this date is the statement by Ciudad Real (Spinden 1913, pp. 7–8) that an old Indian told Fray Alonso Ponce in 1586, "according to what the ancients had said, it was known that it was more than nine hundred years since the buildings were built."

There are two references in the *Maya Chronicles* in the *Book of Chilam Balam* to the founding of Uxmal. The *Tizimin Chronicle* says (according to Roys 1962, p. 72), "10 Ahau was when Ah Suytok Tutul Xiu founded Uxmal. Ten score years it was when they settled at Uxmal." The *Mani Chronicle* gives (ibid., p. 74): "This was the katun, 2 Ahau, when Ah Cuytok Tutul Xiu founded a town at Uxmal." Not only do these two statements disagree, but any Katun 10 Ahau or 2 Ahau or similarly named katun recurred every 256 years. This, of course, has led to much argument as to what dates are indicated. Tozzer (1941, pp. 29–31, fns. 159–162; 1957, 11:55–56) has reviewed the problem, and Roys (1954, p. 19; 1957, pp. 63–65; 1962, pp. 46, 54–56; 1966, pp. 168–169) in particular has given much study to the matter in recent years (also see Foncerrada 1965, chap. 4). Suffice it to say that there has been the tendency of late to regard the Xiu as very late arrivals at Uxmal, long after the major period of occupation when the numerous examples of classic Puuc architecture were erected. When the Xiu "founded" Uxmal is, then, of little help to our dating of the ruins or of Puuc architecture. Roys (see references above) believes this founding was in a Katun 10 Ahau lasting from A.D. 1421 to 1441.

REFERENCES

As might be expected of so famous and important a site, the bibliography of Uxmal is very large. Indeed, the number of items approaches the total for all other Puuc sites combined. Saville (1921) has listed all of the more important, and a good number of less important, works that had appeared prior to his time of writing. To save space I refer the reader to his publication, and for the purposes of an architectural study, I particularly call attention to the following items in that bibliography: Ciudad Real 1588 (1872); Stephens 1841, 1843; Catherwood 1844; Charnay 1863; Brasseur 1867; Holmes 1895–97; Rickards 1910; Seler 1917.

Important works dealing with the architecture of Uxmal and published since 1920 are:

G. F. Andrews 1975, pp. 286–321.
Erosa 1947.
Erosa 1948.
Foncerrada 1965.
Kubler 1962, pp. 144–150, 162–164.
Mariscal 1928, pp. 71–81.
Marquina 1928, pp. 62–65.
Marquina 1951, pp. 762–791.
Mexico 1956a.
Morley 1956, pp. 264–265, 293–294; pls. 24a, 38b, 45c–49, 51a, c, d, 57b, 60a, b, 73f, 74c, d; figs. 34h, 35k–m, 41.
Palacios 1945, pp. 381, 384, 388, 435–464.
Pijoan 1946, pp. 476–506; figs. 765, 766, 769–776, 779–786, 788–807, 901, 926; pl. 19.
Proskouriakoff 1946, pls. 18–20.
Reygadas 1928, pp. 223–235.
Totten 1926, pp. 176–217.

NORTH GROUP OR QUADRANGLE

(Northwest Quadrangle, Casa del Enano)

A large group of buildings, arranged about several contiguous and connecting courts, is located on a small but rather steep hill at the northern edge of the site. As explained above (see Civic Plan), this architectural assemblage looks south along the primary axis of the city, and the principal approach to the group seems quite surely to have been from that direction.

As shown on the Morley map (fig. 389), and on the other maps that are based on Morley's (see p. 209), the northern building of Group 23, or Dos Edificios (fig. 388), a group located at the southern foot of the hill on which the North Group rests, is incorrectly included in the North Group (see Group 23, below). It is possible, but by no means certain, that the North Group is also shown on the Brasseur (1867, p. 255) map (no. 12), as well as mentioned in text (ibid., p. 285).

PLAN AND SECTION

See figure 390. Plan and section by S. G. Morley.

CONSTRUCTION

My work at the North Group consisted of the recording of architectural details that were readily visible or were obtainable by a minimum of excavation. I have no notes on the system of courts and terraces that make up the group. In the process of making his plan and section (fig. 390), Morley, on the other hand, gave much more attention to the whole assemblage than I did, and I quote from his diary (1942, bk. III), a copy of which is in the Peabody Museum of Harvard University:

> I . . . went to the much neglected Northwest Group where I made a sketch map though it is based on measured distances . . . The formal approach is from the south and the one entrance from the southwest corner, passing between A [Str. 1] and B [Str. 2]. Mounds B and C [Strs. 2 and 3] are nearer together at the

southern ends than at their northern ends, in other words Court I is slightly wedge shaped, tapering toward the south. All three [i.e., Strs. 1–3] appear to have been composed of single ranges of rooms each. Toward the right (east) of the north side of Court I is a building with a central arcade, flanked by two higher rooms or buildings. . . .

D [Str. 4] is a building with an arcade running through it from north to south. It is composed of a double range of rooms and on its roof to the east and west are the ruins of other rooms. Farther west . . . there are the remains of another room also on the same higher level and . . . on the west side of the court are the remains of 3 rooms. Perhaps the building [Str. 5] originally had 4 rooms. . . .

The highest and probably the principal construction at the Northwest Group is I [Str. 6] on the north side of Court II. This is a pyramid surrounded on three sides by rooms with apparently two corner rooms at the two back corners and a single stairway on the south side, and a high central platform which extends out over and is on the same level as the roof levels of the five flanking rooms.

Still further to the east of Mounds H and I [Strs. 7 and 6] there is a third court, Court III, with two ranges running out to the east forming the north and south sides of this court, and the main building on its west side [Str. 7] . . . Building I [Str. 6] is composed of but very roughly dressed stones in some cases at least running clear through the walls. On some of the other buildings, D and H [Str. 4 and 7] for example, the building stones are better dressed, but I saw no [indecipherable] anywhere.

I continued on to the pyramid [Str. 6] on the north side of Court II . . . and remapped that. . . . The stairway on the south side went clear to the summit which is 10.50 meters above the level of Court II (on the south side of the pyramid). The long room on the east side is preserved, as also a smaller room at the N.E. corner and the east end of the long room across the back (north). I assume there was a small room at the N.W. corner and a long room across the W. side, i.e., to make the ground plan symmetrical with reference to the N. and S. axis. The level of the roofs of all these rooms was the same as that of the top of the pyramid. There are a few elevations here. The long east room on the upper level which is 8.32 meters long north and south is 4.70 meters high from its floor to the top of the pyramid, including about 40 cm for the capstone and the thickness of the plaster on top of the capstone. This makes the height of the room itself about 4.30 meters. From the level of the terrace upon which the building stands down to the level of the great terrace [referring to north side of pyramid] is 7.50 meters, or 3 meters higher than the level of Court II. [Morley seems to have made an error here. According to his figures, the level of the "great terrace" is 1.70 m lower than Court II.] Just southeast of the northeast corner of this pyramid . . . is a building [Str. 7] that would appear to have had three stories.

We went to the highest building on the west side of the court [i.e., Court II] . . . the north end of which only is now standing. . . . I examined the range of rooms which is below (east) it [Str. 5]. Only the westernmost [northernmost ?] of these shows but think this range had formerly extended clear across this court on its west side. In a room adjoining the north room of this range on the east side we found another room with its lintel in situ and both jambs were preserved.

Morley makes no mention of the presence of chultuns in the North Group, nor do my notes, but it would be surprising if these cisterns were not there, the entrances now choked with debris.

Two pieces of sculpture, M4 and M5, were found in this group (see Miscellaneous Sculpture, below). The first was in the northeast corner of Court I, the second in the vaulted passageway through Structure 4.

Structure 4

Badly fallen ranges of rooms on each side of portal vault that connects Courts I and II (fig. 391). Although Morley plan (fig. 390) does not show it, there must have been stairway or ramp leading up from Court I to passageway.

SUPERSTRUCTURE

Plan. See figure 390.

Sections. See figures 390, 392a.

Base Molding: Buried, but probably plain (fig. 392b, c). Crosses southern end of portal vault and presumably the same at north. Should assume base molding would circle entire building.

Walls. Normal Puuc with well-cut and dressed outer facing stone and less well-cut stone on inner wall surfaces.

Walls rather thin, measuring .54 m at doorjambs.

Vaults and Beams. Normal Puuc with quality of vault stone comparable to outer wall stone.

Arrangement of vault beams shown in figure 392a.

Molding. Only medial molding now in place. Apparently a simple string course with slight batter on face (figs. 391, 392a). Same course forms spring of vault in portal (fig. 392b, c).

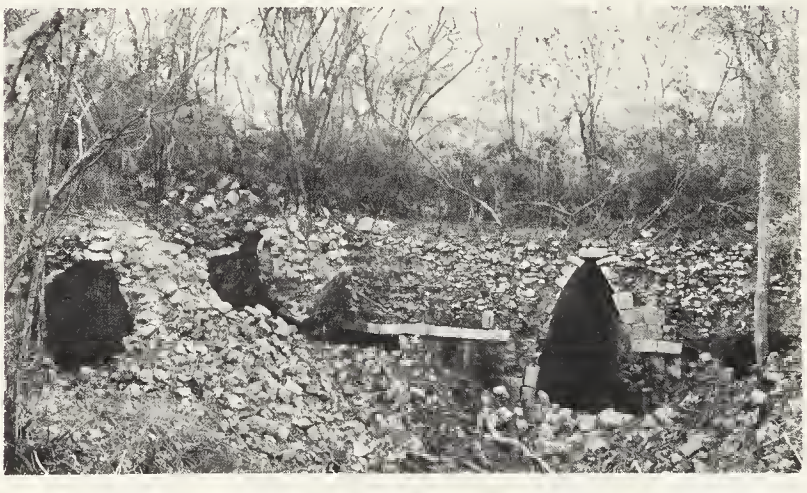


Figure 391. Uxmal, North Group, Structure 4. Portal vault and remains of east and west wings, looking south.

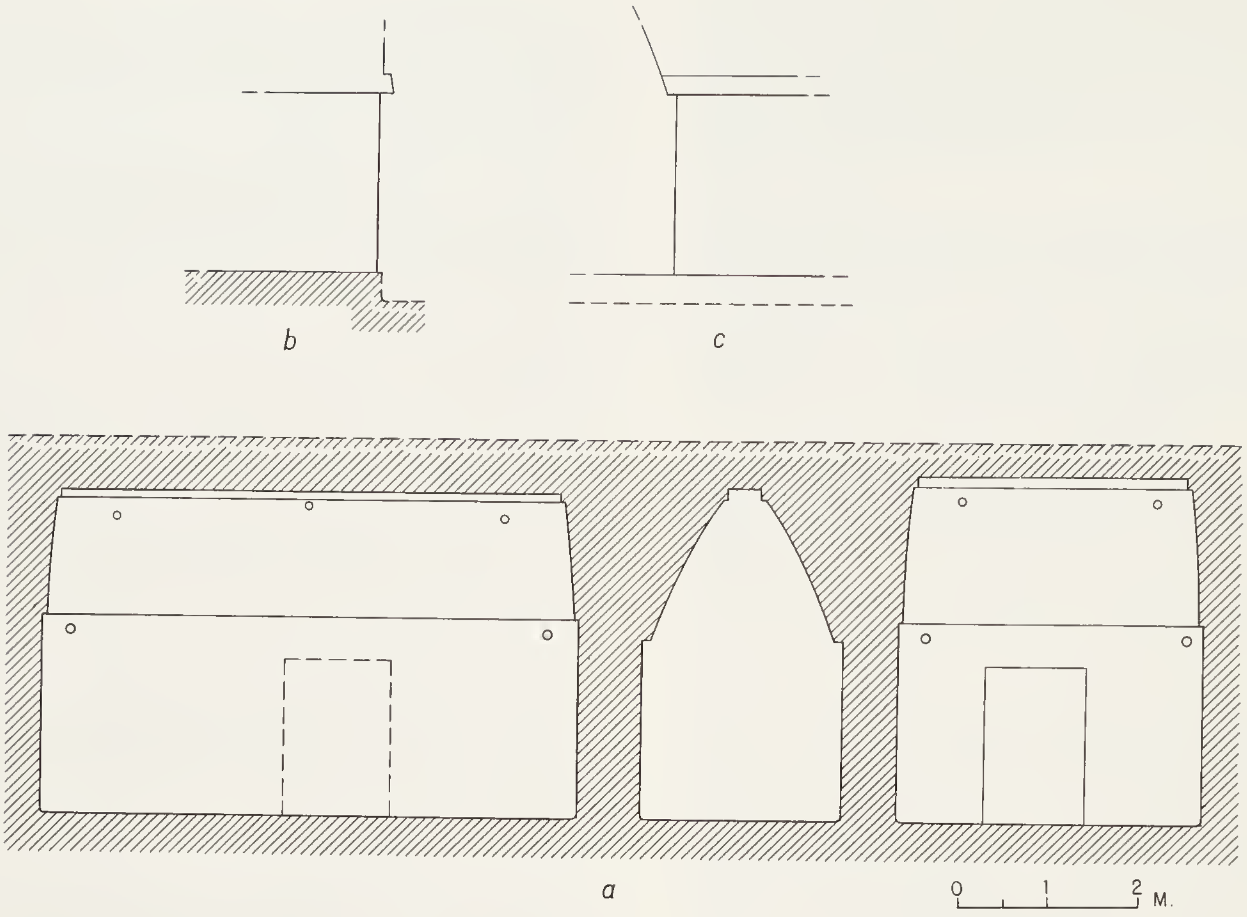


Figure 392. Uxmal, North Group, Structure 4: a, east-west section through portal vault and flanking southern rooms; b, elevation of east wall of portal vault at south corner; c, elevation of south wall of east wing at corner of portal.

Structure 5

My brief notes deal only with the upper, or western, part, a four-room building of which only the northern half is standing.

SUPERSTRUCTURE

Plan. See figure 390.

Construction. Essentially normal Puuc masonry but of larger and better dressed stone than in Structure 4. Judging by masonry, building might be later than others in group, but number of structures have no masonry showing.

Two-member medial molding of lower apron member of two courses topped by simple rectangular member (figs. 393b, 394).

Decoration. Moldinglike decoration on front wall of building slightly below medial molding (figs. 393b, 394). Occurs just north of where central doorway should be. Although Morley's plan (fig. 390) shows northern jamb of this doorway in position, my notes refer to broken end of wall. In any event the decoration might have had something to do with the doorway, a practice noted in Chenes architecture (see Pollock 1970, fig. 63).

Structure 6

This high two-story building on the north side of Court II dominates the North Group. The structure is badly fallen, the only considerable amount of standing masonry showing at the northeast and east. I have no notes on the substructure and cannot comment on the terracing and northern stairway shown on the Morley plan (fig. 390).

SUPERSTRUCTURE

Plan. See figures 390, 395a. As my plan differs somewhat from that of Morley's, I include both.

Sections. See figures 390, 395b.

LOWER STORY

Construction. What is visible is normal Puuc. Large stone doorjambs, stone lintels, well-dressed wall stone and vault stone, offset on all sides of room at spring of vault and under capstones. Masonry not of highest quality but average.

UPPER STORY

Base Molding. Simple molding of large dressed stone (fig. 395b).

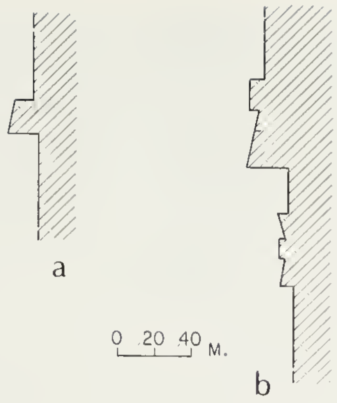


Figure 393. Uxmal, North Group. Sections of medial moldings: a, Structure 4, east wing; b, Structure 5, east facade of upper story, showing decoration below molding.

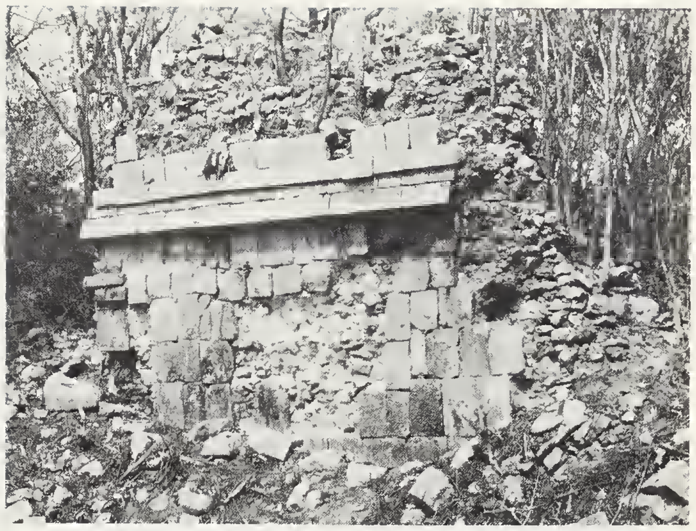


Figure 394. Uxmal, North Group, Structure 5. Remains of east facade of upper story, showing medial molding and decorative element (at left) below molding.

Walls. Roughly shaped slabs in outer and transverse walls (fig. 396). Stones run full thickness of wall. Very rough masonry with much chinking.

Longitudinal inner wall that lies against solid core of pyramid is of roughly dressed blocks with long axes parallel to wall (fig. 396a). Also very rough masonry with much chinking.

Doorways. Jambs of same masonry as outer walls, but with stones better shaped and roughly dressed on surface facing entrance.

No indication of character of lintels other than width of east doorway (Room 5), which is 2 m and would seem to indicate wooden beams.

Vaults. Roughly shaped stone varying from slab to block (fig. 396). All stone deeply tenoned into vault masonry. Spring course and offset course immediately below capstones made of dressed stone. Both offsets are on all sides of room.

Moldings. Simple apron member formed medial molding (figs. 395b, 396). Upper facade seems to have risen vertically, or very slightly inset, from upper edge of molding. A single stone of first course of cornice molding remains in place (fig. 396a, upper right corner). Like medial molding.

Stone in moldings and in upper facade roughly dressed.

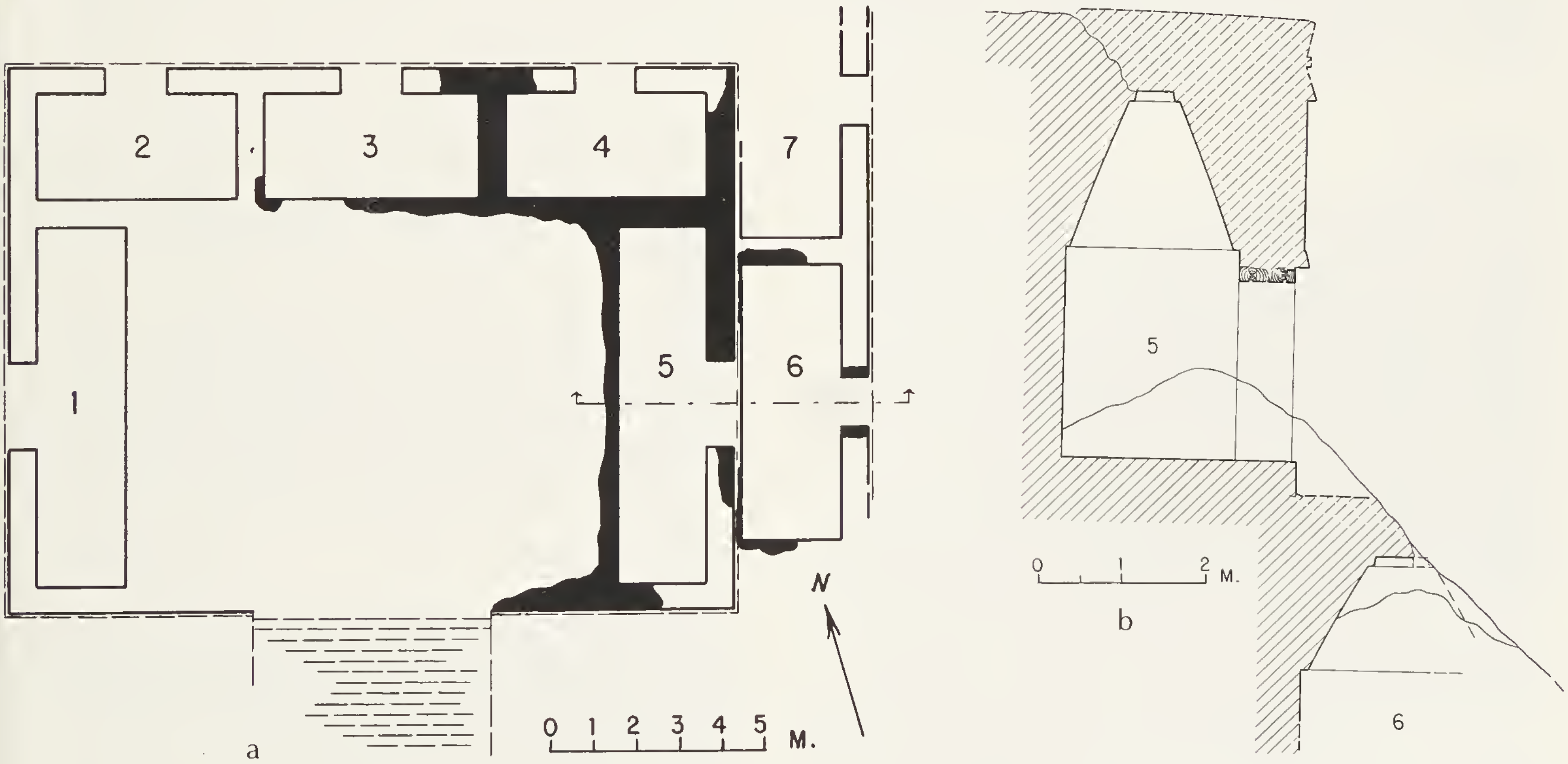


Figure 395. Uxmal. North Group, Structure 6: a, plan; b, section through Rooms 5 and 6.

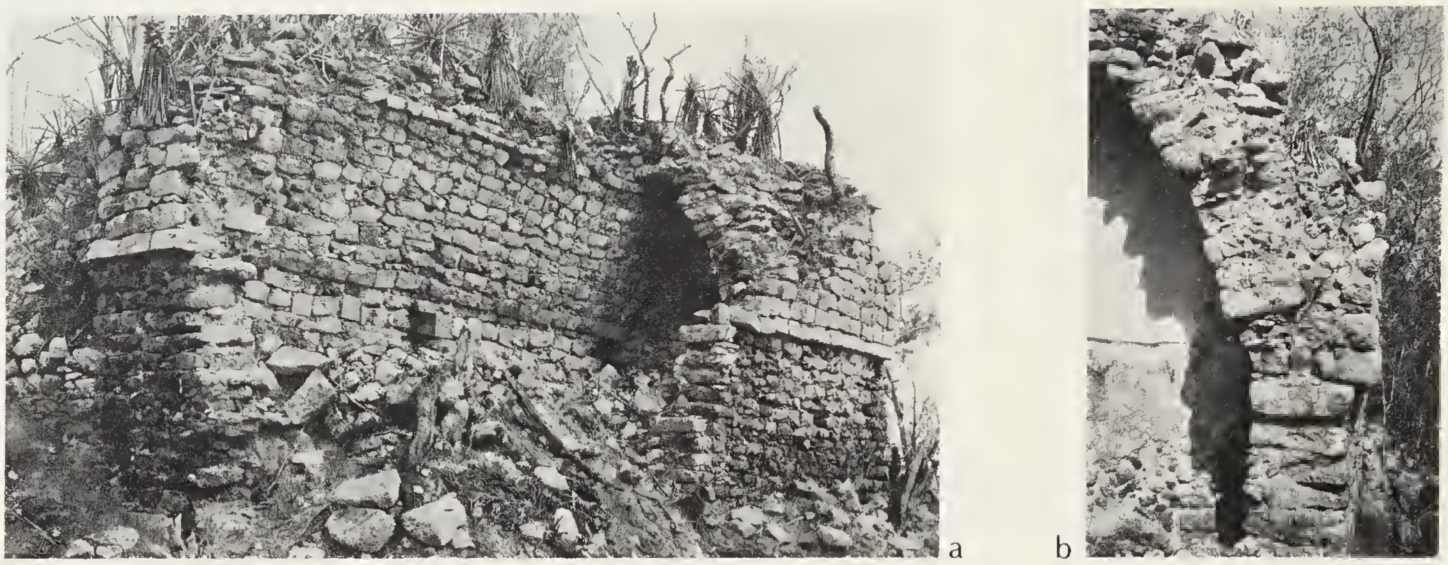


Figure 396. Uxmal, North Group, Structure 6: a, Room 5, looking north-northwest; b, west end of Room 4, looking west, and showing north wall and side of vault in section.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

As east wall of Rooms 4 and 5 rests almost directly over rear wall of Rooms 6 and 7 (fig. 395), it seems certain that upper-story rooms were built subsequently to lower story. Masonry and construction practices of lower story (Room 6) are normal Puuc. Thus it seems questionable that crude masonry of upper story represents an early period at Uxmal, as suggested by Seler (1917, pp. 15–16) and Morley (1942, p. 252), and possibly by Blom (1934, p. 57), although the last may be referring to Structure 7 (see below). Rather than being early, it is possible that the upper story was built in relatively late (post-Puuc) times.

Structure 7

Morley refers to this building as having three stories (see above), an observation that is in accord with my memory but my notes carry no mention of the fact. On the Morley plan (fig. 390) the isolated single room at the southeast corner of Structure 6 represents the third story. The rooms just south and east of the third-story room are the second-story rooms, and further east, facing on Court III, are the first-story rooms. Whether or not the last should be considered part of Structure 7 is questionable, but in any case there seem to have been three levels of construction here. My notes deal entirely with the so-called second-story rooms mentioned above.

SUPERSTRUCTURE

Plan. See figure 390.

SECOND STORY

Construction. Walls of southwest room of rough block masonry (fig. 397a). Vault is stepped and formed of large undressed slabs, roughly shaped and deeply tailed into masonry (fig. 397c). Small square window into next room at east end of room. Single rough slab seems to mark lowest course of medial molding.

Room immediately east of southwest room (fig. 390) and long room north of it have walls of same rough masonry as southwest room, except for thin wall with doorway that divides two rooms. Thin wall is secondary to other walls and is of Puuc style masonry. Vaults of both rooms are in style of Puuc construction and contemporaneous with small transverse wall (fig. 397b).

Very little showing of room or rooms still farther east, but well-cut jamb stones of east entrance suggest walls of Puuc-style masonry except for medial wall between long rooms.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Only excavation can make certain of architectural sequence in second story, but it seems to be as follows: (1) entire southwest room and walls (except for small transverse wall with doorway) of rooms just east and northeast; and (2) small transverse wall, outer walls of easternmost room or rooms, and vaults of all rooms east of southwest room.

As the second period is represented by normal Puuc masonry and construction practices, the first period would seem to be pre-Puuc (cf. Oxkintok, Strs. 1B1, 3B5; Bakna, Southeast Court, East Building).

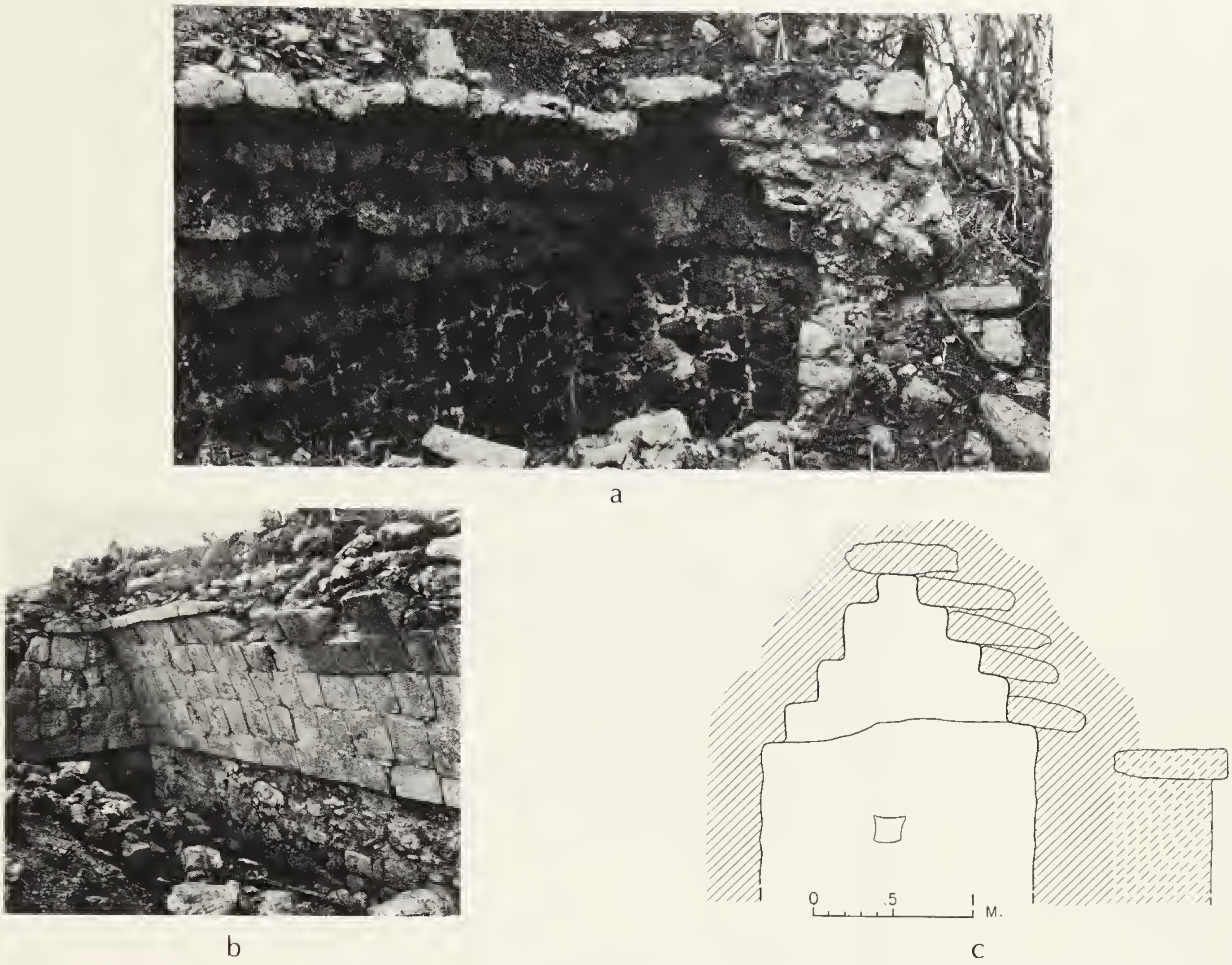


Figure 397. Uxmal, North Group, Structure 7, second story: a, southwest room, looking northeast, and showing rough wall and vault masonry; b, long inner east room, looking southwest, and showing rough wall masonry surmounted by dressed stone vault; c, north-south section through southwest room.

GROUP 23
(Dos Edificios)

This group consists of three structures, although it carries the label "Dos Edificios" on the Tulane University map (fig. 388). The group, which is notable for the remains of architecture of the Chenes style, has been described elsewhere (see Pollock 1970, pp. 78–80). As previously mentioned, the northern building of Group 23 is incorrectly shown as belonging to the North Group on the Morley map (fig. 389) and on the several maps that copy Morley's.

GROUP 22
(Northwest Group)

I have no general description of this group. My notes deal entirely with the North Building, presumably the best preserved structure. The plan of the group on the Morley map (fig. 389) differs from that on the Tulane map (fig. 388), and I believe, but cannot be certain, that the Tulane map is nearer to being correct.

? North Building

SUPERSTRUCTURE

Plan. See figure 398a.

Section. See figure 398b.

Elevation. See figure 399. Partially restored.

Base Molding. Single course of large finely-dressed stone. Unusually large projection (.16 m) from wall of building (fig. 399).

Floor. Usual rise in level in rear room (fig. 398b).

Walls. Longitudinal walls .80 m thick, transverse walls .70–.75 m thick. Facing stone finely dressed and fitted on both outer and inner wall surfaces (figs. 400a, 401). Usual construction level at height of medial molding and one course below spring of vault.

Doorways. Jambs made of large, beautifully cut and dressed stone, one jamb being a single stone. Wooden lintels of two or three beams (fig. 401).

Wall Openings, Depressions, and Projections. Small windows in front wall just below medial molding. Two in

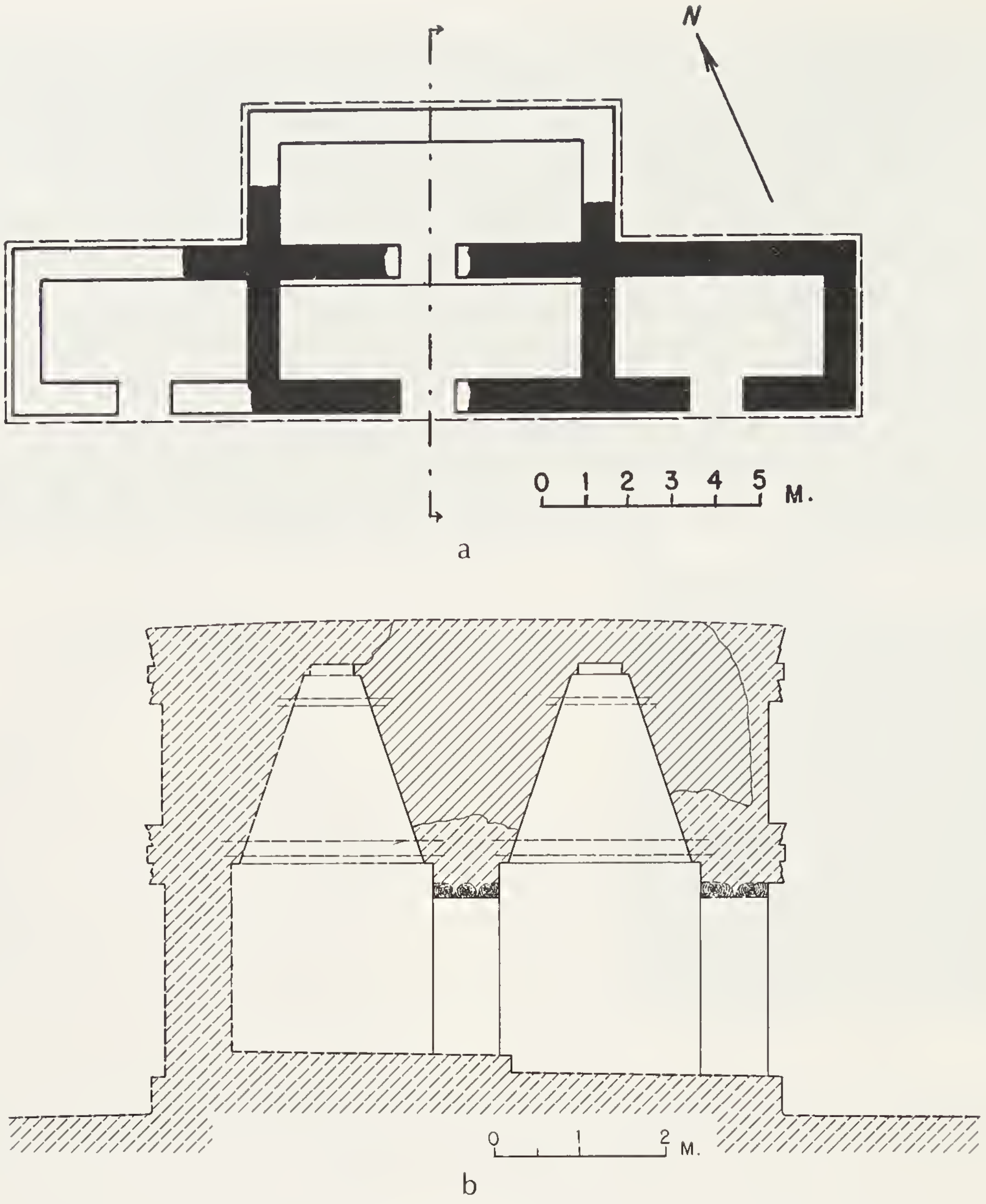


Figure 398. Uxmal, Group 22, North Building: a, plan; b, north-south section.

each room, spaced more-or-less evenly between door and end of room. U-shaped and measure about .15 m high by .10 m wide (fig. 399).

Tongue type of cordholders in inner-wall surfaces and hemispheroid rod sockets in doorjambs. Also rings projecting from inner-wall surface.

Bench. Fragmentary remains of bench at west end of center front room.

Vaults and Beams. Specialized, beautifully faced and fitted vault stone (fig. 400a,c). Vault faces or soffit slopes are flat rather than usual concave surface and form absolutely true planes (fig. 398b). Capstones and small offset course beneath capstones are finely cut, fitted, and faced stone.

Originally were two beams in each room in spring course and four at bottom of course below small offset at top of vault. Sockets in which beams fitted were formed of beautifully cut stones in shape of an inverted U (fig. 400a,b).

Moldings. Highly decorative five-member moldings (figs. 399, 401). Medial and cornice moldings same but for large coping course on latter.

Decoration. Seemingly none other than moldings and the usual possibility of painting.

Terrace of the Monuments
(Stela Platform)

This low platform southeast of Group 22 supports all but one of the stelae and a large proportion of the altars that are known from Uxmal. The structure and its monuments have been described elsewhere (see Morley 1970).

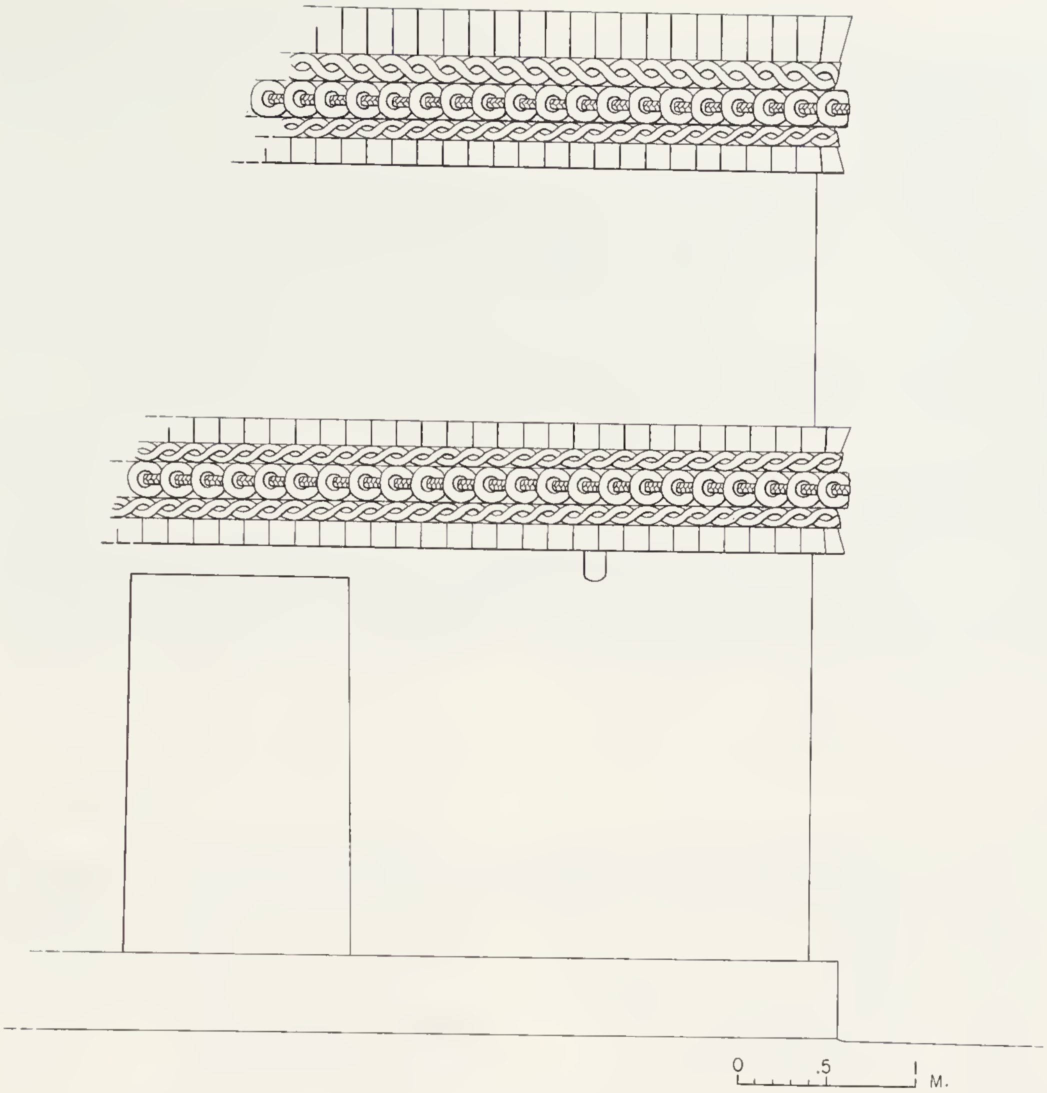


Figure 399. Uxmal, Group 22, North Building. Restored elevation of east end of south facade.

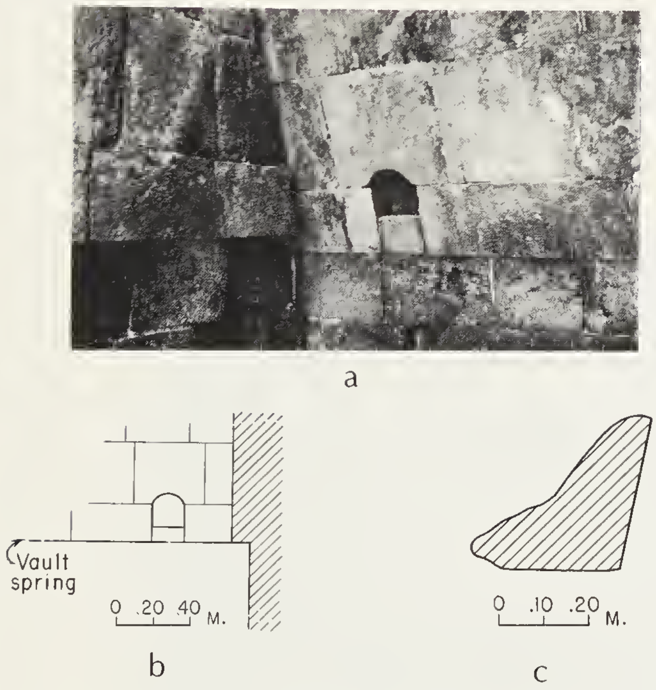


Figure 400. Uxmal, Group 22, North Building. Vault details: a, b, beam sockets; c, section of typical vault stone.

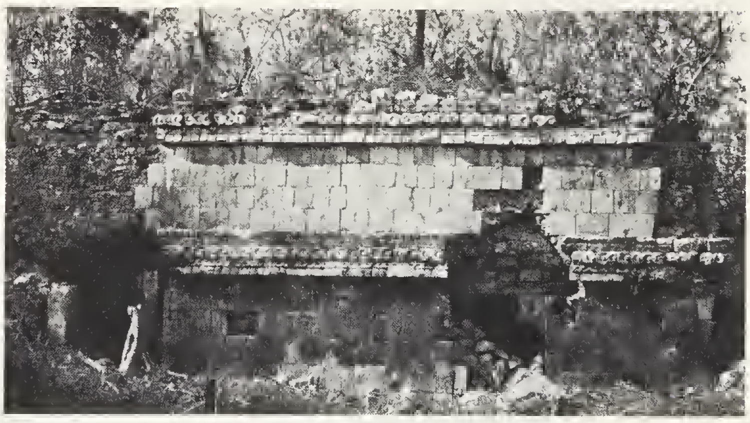


Figure 401. Uxmal, Group 22, North Building. Eastern half of south facade, looking north. Note wooden lintel in east doorway.

CEMETERY GROUP

(Cemetery, Campo Santo, Place de Sacrifices,
Los Sepulcros, El Osario)

Large group located near the western edge of the central area of the city (figs. 388, 389). Group consists of good-sized northern pyramid and buildings surrounding court on which pyramid faces. Primary approach seems to have been from south.

There is no good general description of this group, that of Seler's (1917, pp. 148–153) leaving much to be desired. My notes deal only with the western buildings and the sculptured platforms, or altars, in the courtyard. It is my memory that there are the remains of a fallen portal vault at the center of the southern range of buildings, and Morley's diaries covering his work at Uxmal in 1941 confirm this recollection. I think there was a stairway at the south leading from ground level to the portal entrance, as shown on the Morley plan (fig. 389). Seler (1917, p. 149) writes that there was a western projection into the courtyard from the eastern range. I assume he is referring to the low platform on which Miscellaneous Sculpture 10 rests (fig. 402). Seler (ibid.) also mentions 36 steps leading from the court to the summit of the northern pyramid. Other than what is noted above, there is little that does not conform to the Morley plan. All superstructures, other than those at the west, are too badly fallen to yield any information without excavation.

Miscellaneous Sculptures 6–12 were found in the courtyard of this group (see Miscellaneous Sculpture, below).

Western Buildings

Three buildings along a roughly north–south axis rest on a high substructural platform and face east on the closed courtyard at the center of the Cemetery Group (figs. 388, 389). Only the central building is in relatively good condition, the north building being almost completely fallen, the southern one mostly fallen (fig. 403).

I have no notes on the substructure other than that the stairway rising from the court to the central building was apparently wider than the low platform at the front of the building.

SUPERSTRUCTURE

Plan. See figure 404.

Sections. See figure 405.

Base Moldings. Two well-cut courses of stone, the lower projecting .17 m beyond the upper (fig. 405), on the Central Building.

Apparently single course of stone on North and on South Buildings, that on North about on level of upper course of molding on Central Building, that on South Building about on level of lower course.

Stairway. Low platform same height as base molding in front of and centered on Central Building (fig. 404), lies at top of stairway that rises from court level. Stairway seemingly somewhat wider than platform.

Floor. Usual buff color.

Walls. Finely dressed and fitted exterior facing stone (fig. 407a, b). One grade under finest. Inner facing stone well dressed but not quite up to exterior (fig. 406).

Usual break in construction below medial molding and place left for lintels, which were apparently put in place somewhat later.

Doorways. Cornerstone variety of jambs and wooden lintels in Central Building (figs. 405a, 406, 407a). Two beams form each lintel. Relatively rare example of conscious breaking of joints in masonry of jambs. Lateral doorways in east facade secondarily blocked (see Secondary Construction . . . , below.)

North and South Buildings follow common Puuc practice of large stone jambs and stone lintels. Number and

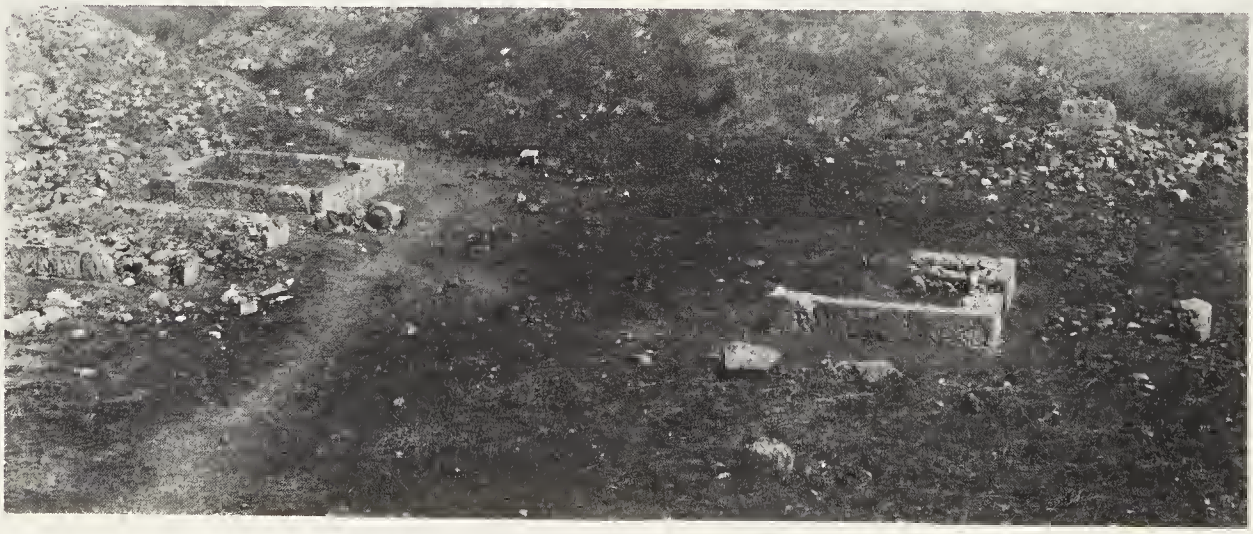


Figure 402. Uxmal, Cemetery Group. View of court, looking east, and showing Sculptured Platforms 2–4, southeast foot of North Pyramid, and Miscellaneous Sculptures 6, 7, and 10–12.

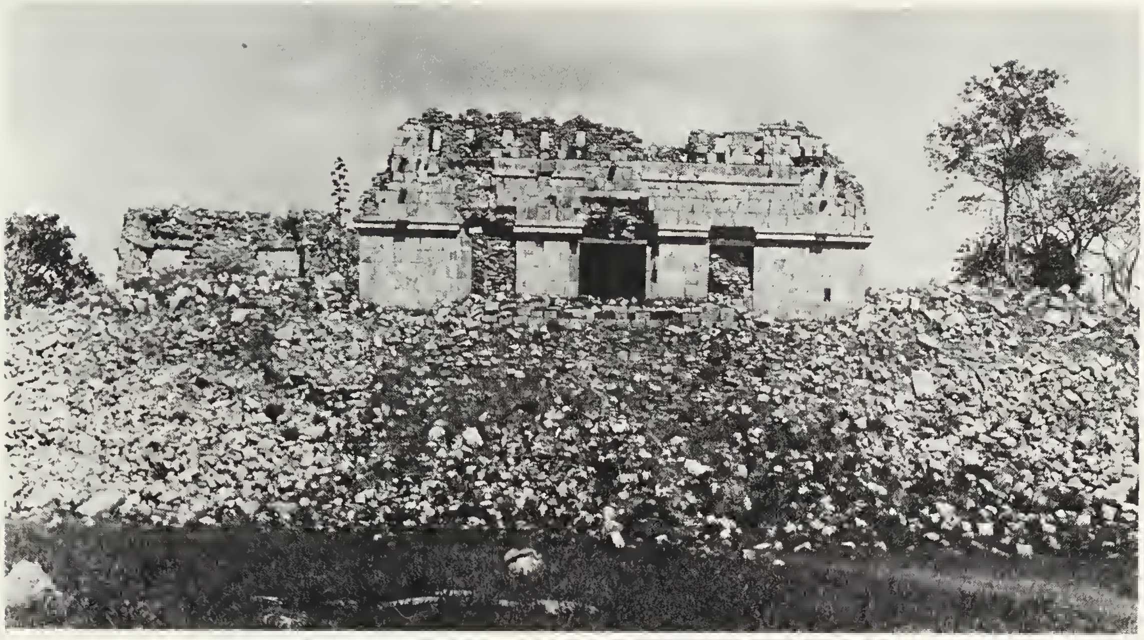


Figure 403. Uxmal, Cemetery Group. View of Western Buildings, looking west.

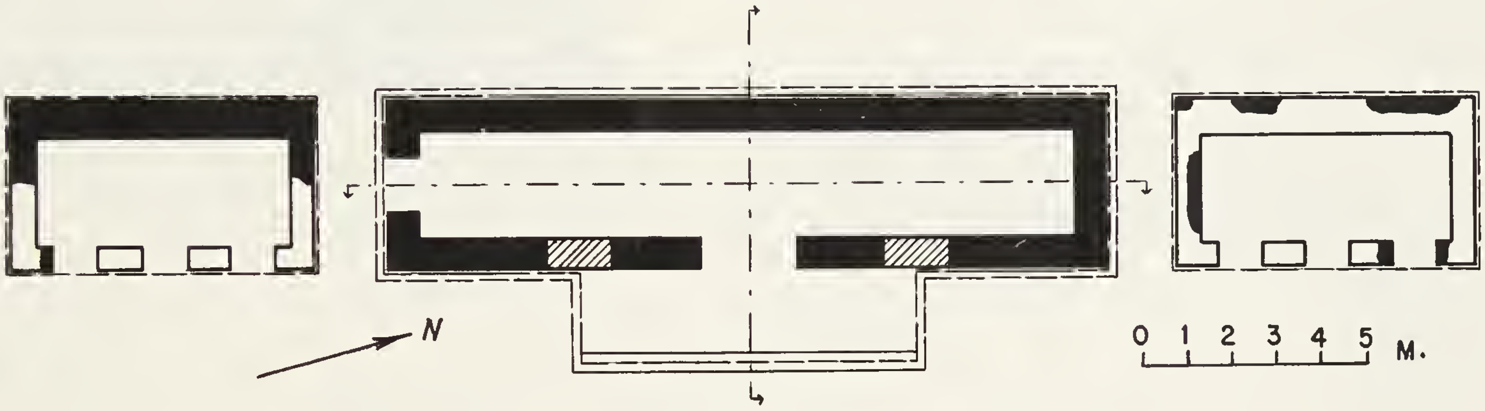


Figure 404. Uxmal, Cemetery Group. Plan of Western Buildings.

location of jamb and lintel stones in debris indicate three doorways in each building.

Wall Openings and Projections. Small windows about .15 m square in second course below spring of vault and just below medial molding of Central Building. Four windows in rear wall, one in north end wall (fig. 406), and one near each end of front wall (fig. 405b).

Ring cordholders projecting from second course below spring of vault (i.e., same level as windows) in front wall of Central Building. Four on inner wall face, spaced so that each doorway is flanked by a pair of rings (fig. 405b). Six rings projecting from outer face of front wall at level just below medial molding. Four rings in same positions as those on inside and one near each corner of building.

Vaults and Beams. Vault in Central Building is normal Puuc in design and comparable to walls in quality of masonry (fig. 406).

Holes indicating four beams in spring course and four just below small offset at top of vault (fig. 405b).

Fragment of vault in South Building indicates it was similar in quality to vault in Central Building.

Moldings. Central Building carries two-member medial and cornice moldings (figs. 405, 407a). Cornice molding is interrupted by plain wall surface at center and at each end of eastern facade (see Decoration, below).

South Building has course of beveled stone forming medial molding of a single apron member (fig. 407b). Cornice molding fallen and design unknown.

Roof Structure. Perforated flying facade on Central Building (figs. 403, 405). Faced with same well-cut stone used elsewhere on exterior wall surfaces. Roof structure may have had second tier of windows, now fallen, but not much debris on roof.

Decoration. Projecting stone tenons on upper eastern facade and on flying facade of Central Building indicate considerable use of stucco decoration (figs. 405a, 407c). Breaks in cornice molding and arrangement of tenons suggest a design that rose from medial molding and continued

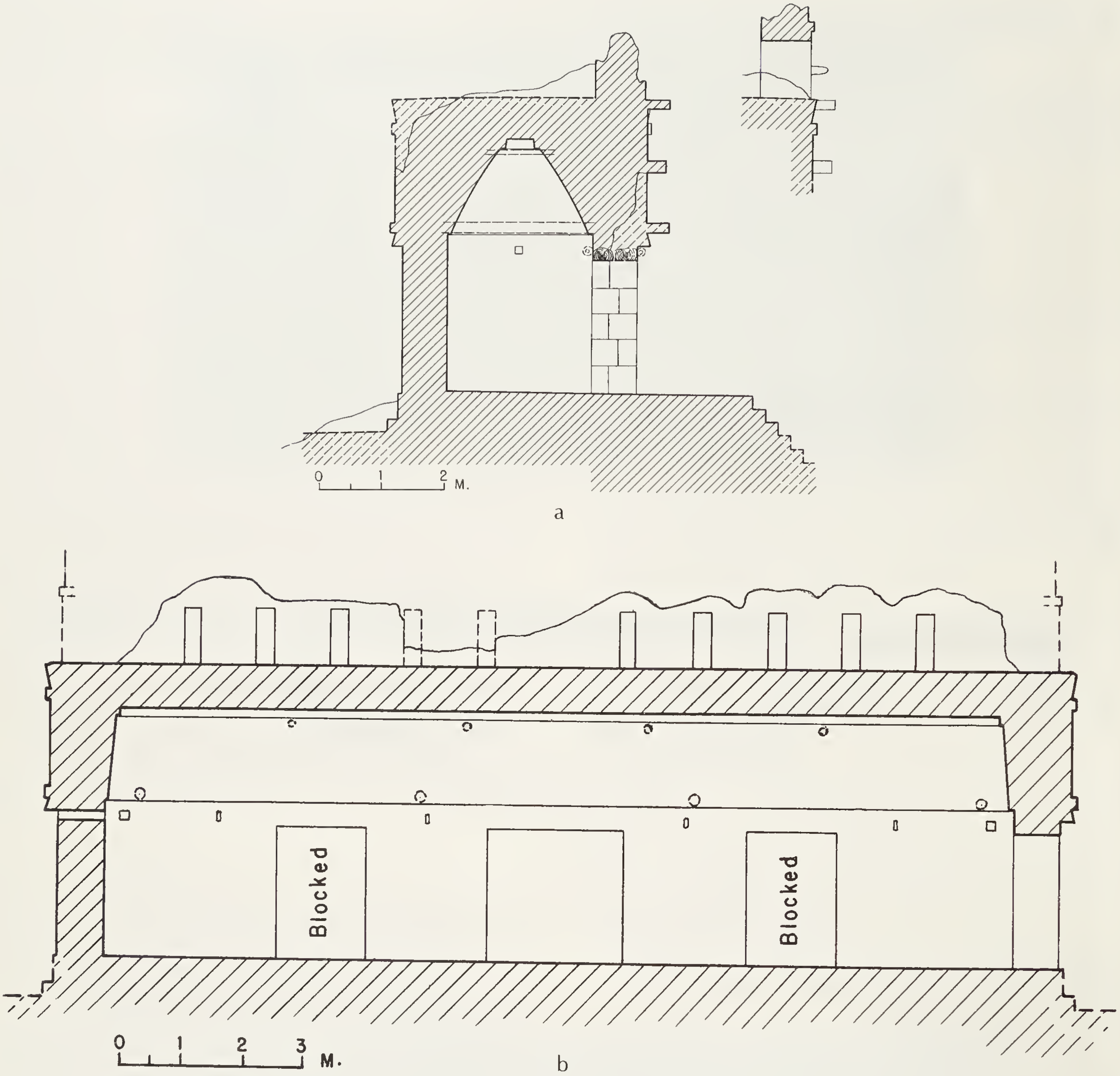


Figure 405. Uxmal, Cemetery Group, Central Western Building: a, transverse section, and detail of window in flying facade; b, longitudinal section, and elevation of east side of room.

on to roof structure at center and at each end of facade. Seemingly comparable to decoration on third story of Structure 2B1 at Sayil (see p. 101) and possibly Structure 1 at Xlabpak (see p. 64) and North Range of Nunnery Quadrangle at Uxmal (see below).

Traces of red paint on medial molding and on wall below medial molding at rear of Central Building. Seler (1917, p. 150) reports that the whole building was covered with stucco on the outside and painted red. I do not know his evidence for this assertion.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

No way of telling sequence of construction of three buildings without excavation. If they are not contemporaneous, balanced arrangement suggests that central building was erected first.

Lateral doorways in front wall of Central Building secondarily blocked by masonry of well-cut and dressed stone rather carelessly laid in mud mortar. Potsherds, bone, and building debris in mud mortar.

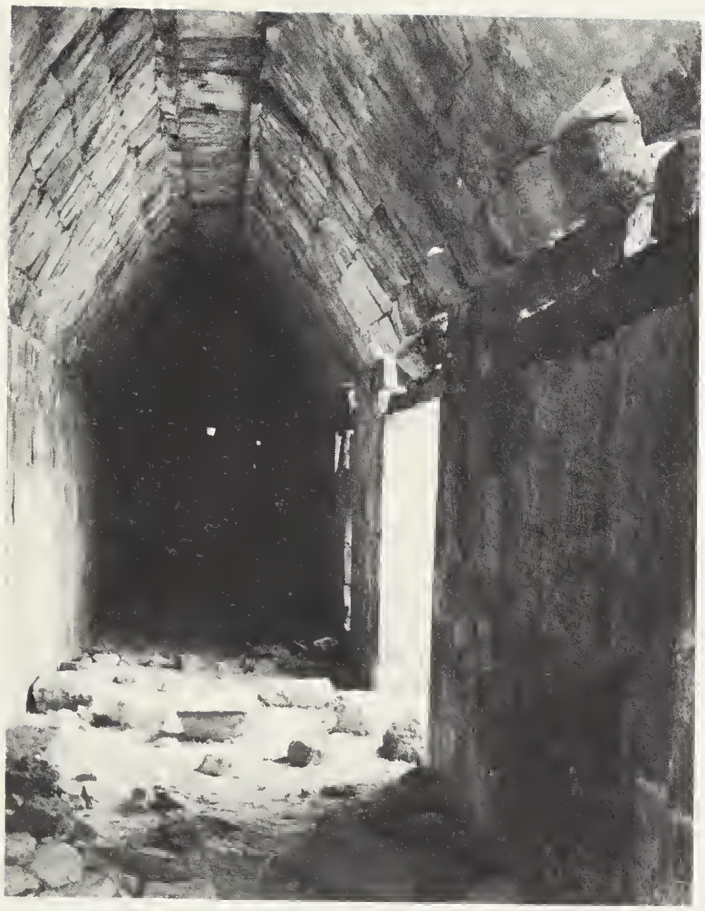


Figure 406. Uxmal, Cemetery Group, Central Western Building. Interior, looking north, and showing blocked doorways with wooden lintels, wall opening at end of room, and vault construction.

Sculptured Platforms or Altars

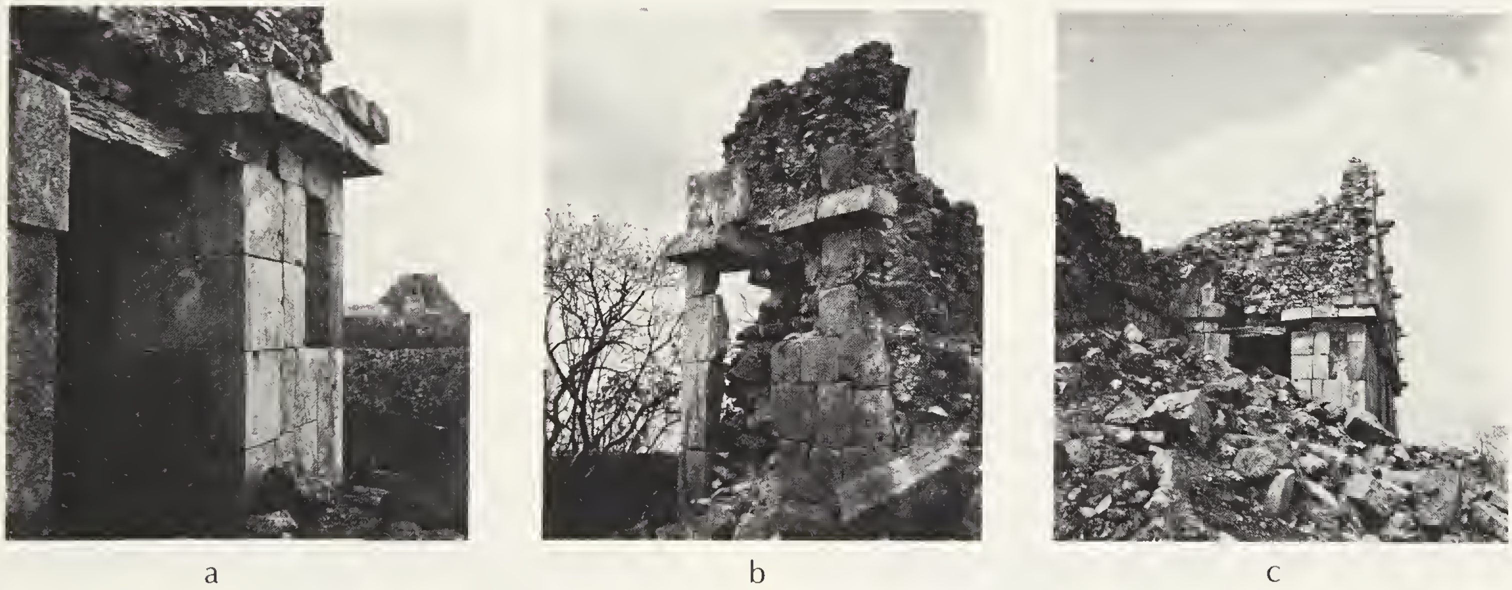
There are four low platforms, or altars, at the northern end of the court of the Cemetery Group (fig. 389). The stones that form the sides of the platforms are sculptured with hieroglyphs and skulls and crossed bones, and it is the latter designs that give the name to the group.

In 1941 Morley repaired the walls of the four platforms by replacing and cementing in position such stones as he was able to find. Over the years these stones, which had been noted and photographed by numerous visitors to the ruins (e.g., see Maler 1912, 2d ser., pls. 3–7; Seler 1917, pls. 31–33), had evidently been moved a number of times, and some were missing entirely owing to breakage or removal from the site. The accuracy of the Morley reconstruction is thus open to some question, a question that is not resolved by his diary. As some stones were presumably still in place, or nearly so, with the apparent exception of Platform 4, and as the decorative scheme is relatively simple, I believe there is every chance, again with the exception of Platform 4, that the reconstructions are in the main correct. The drawings and photographs given here are of the repaired platforms (figs. 408–412).

PLATFORM 1

(Northwest Platform)

The northern end of Platform 1 rests against, or merges with, the low terrace that extends across the foot of the northern pyramid (fig. 389). There are thus only three sides to the platform.



a

b

c

Figure 407. Uxmal, Cemetery Group, Western Buildings: a, south end of Central Building, looking northeast, and showing jamb of south doorway, wooden lintel, and medial molding; b, southwest corner of South Building, looking northwest, and showing wall masonry and medial molding; c, view of Central Building, looking north, and showing south doorway and numerous stone tenons on east facade.

PLAN AND ELEVATIONS

See figures 408, 409.

CONSTRUCTION

Walls complete but for southeast corner. Unsculptured area on central stone in south wall suggests steps at that place. Considerable debris inside of walls, and it is assumed that platform once contained a stone fill that supported a smooth, probably level, plaster floor.

PLATFORM 2
(North Central Platform)

PLAN AND ELEVATIONS

See figures 408, 410.

CONSTRUCTION

Walls, which are slightly lower than those of other three platforms and do not carry hieroglyphic band at top, are complete on north and east sides, but have southwest corner and one other stone missing from west side, and a large center section missing from south side. As sculpture carries across all sides of the platform except for missing section at south, it is assumed stairway was centrally placed at south. Rectangular openings cut into tops of wall stone (figs. 408, 410) suggest drains and raise question whether upper surface of platform was simple level floor or involved channels and perhaps other irregularities.

PLATFORM 3
(Northeast Platform)

PLAN AND ELEVATIONS

See figures 408, 411.

CONSTRUCTION

Walls complete but for northwest corner. Unsculptured area on central stone in south wall suggests step at that place. As with Platform 1, suppose upper surface of this platform was once a smooth, level plaster floor.

PLATFORM 4
(South Platform)

I am not completely certain, but am under the impression from Morley's diary that the wall stones of Platform 4 were widely scattered and that none was found in its original position. There also seem to have been no debris or remains of the fill that might be expected to mark the location of the structure. In determining where to rebuild the platform, Morley was influenced by the location of a large cylindrical stone (M11; see Miscellaneous Sculpture, below) on the north-south axis of the court and slightly south of the location he selected for the platform. It seems to me that the location and reconstruction of Platform 4 are very much open to question.

PLAN AND ELEVATIONS

See figures 408, 412.

CONSTRUCTION

According to Morley reconstruction, west wall is complete and south wall lacks only small central section. North wall has only the west corner and the adjacent stone. Approximately the southern half of the east wall has been rebuilt. Left end of third stone from right on south side (fig. 412) shows plain unsculptured area suggesting arrangement similar to south side of Platform 3 (fig. 411) and the possibility of a stairway.

GROUP OF THE COLUMNS
(Temple of the Columns)

A small and little-known group of buildings lies between the north pyramid of the Cemetery Group and the Nunnery Quadrangle (fig. 388). The Morley map (fig. 389) shows a plan of the western building in the group, but I find no mention of the structure in Morley's diary, nor do I know of any description of the building. My notes deal only with the eastern building or Temple of the Columns.

Temple of the Columns

SUPERSTRUCTURE

Plan. See figure 413a.

Section. See figure 413b.

Base Molding. First-story molding deeply buried and character unknown.

May have been plain molding over .30 m high on upper-story structure, but uncertain.

Stairway. Seems to be debris of stairway to second story at rear (east) of building. No steps actually visible.

Floor. Normal.

Walls. Front wall very thin, only .44 m at jambs. Transverse wall between northern and central rooms .70–.75 m thick. No other wall measurements possible without excavation.

Interior wall facing of average roughly dressed stone. No outer wall stone visible.

Doorways. Entrances to north and south rooms presumably normal simple Puuc doorways. Single fallen stone lintel from doorway of north room.

Typical Puuc two-column doorway with rectangular capitals and corbels on jambs forms entrance to central room (fig. 414; and see Blom 1934, fig. 13). Of interest in that columnar entrances were apparently less popular at Uxmal than at many Puuc sites. Northern of two columns a single stone shaft, rather than two or more drums, and rather flat sided. Jambs of normal full-width stones.

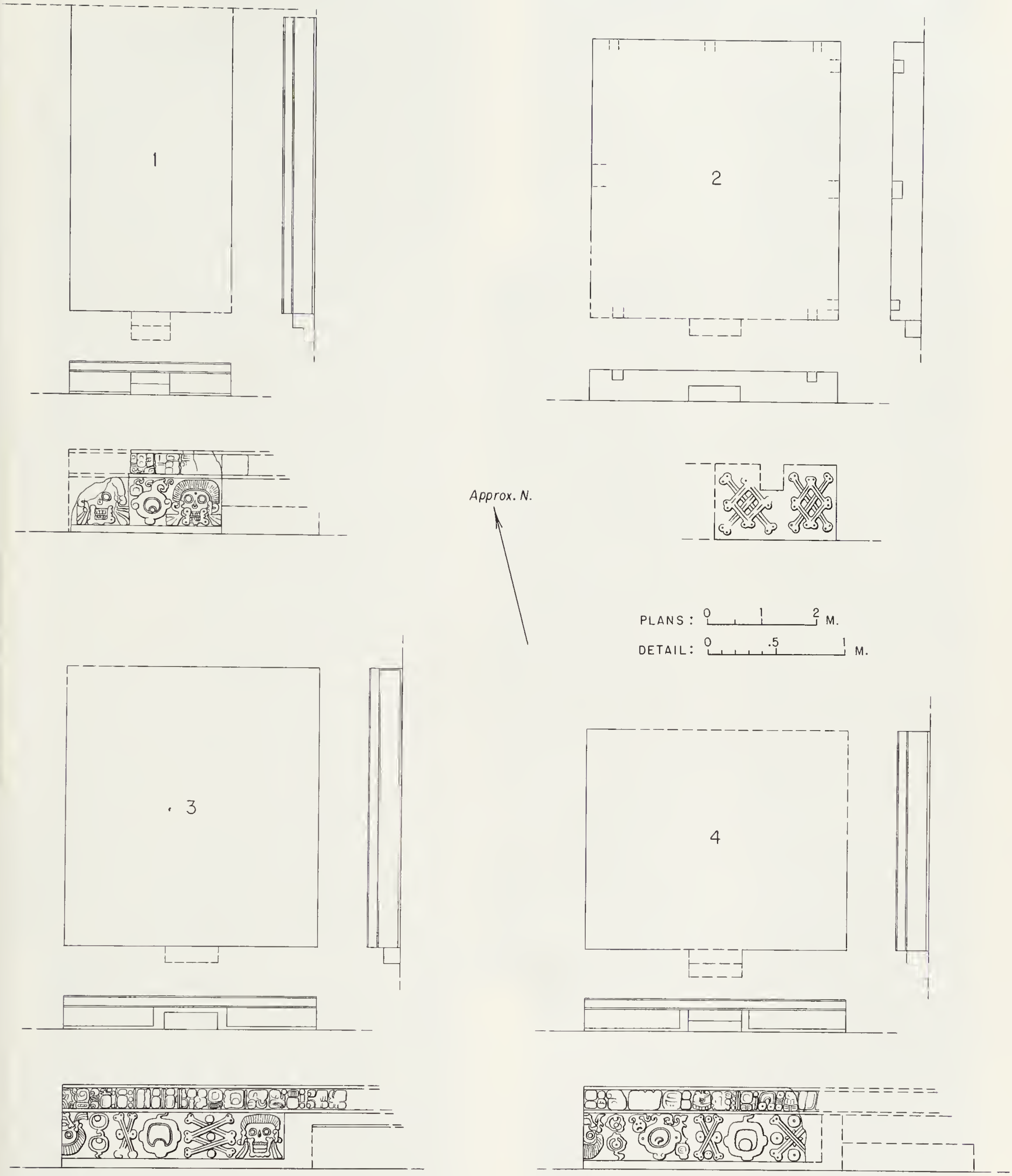


Figure 408. Uxmal, Cemetery Group, Sculptured Platforms 1–4. Plans, elevations, details.

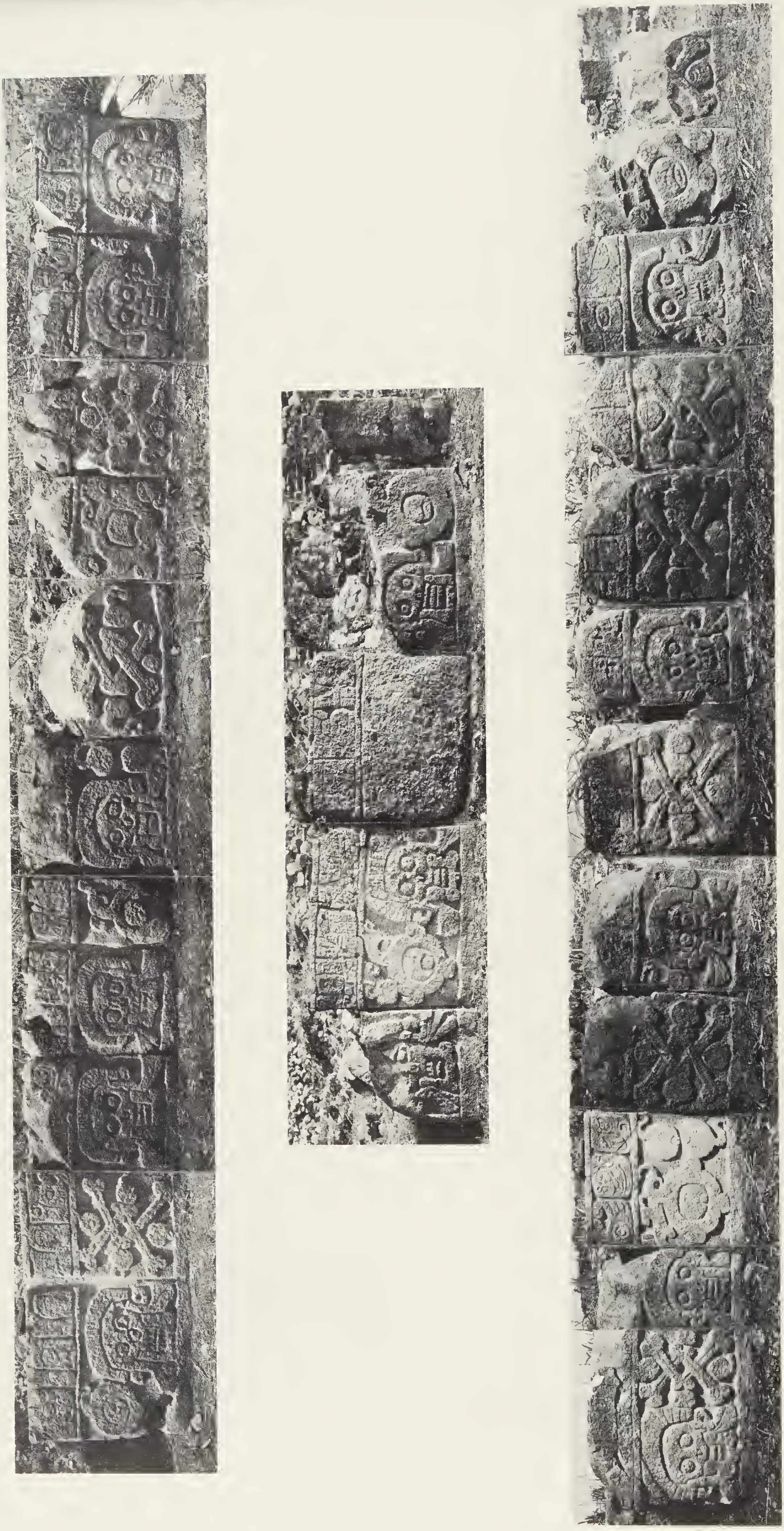


Figure 409. Uxmal, Cemetery Group, Sculptured Platform 1. East, south, west sides (from top to bottom).

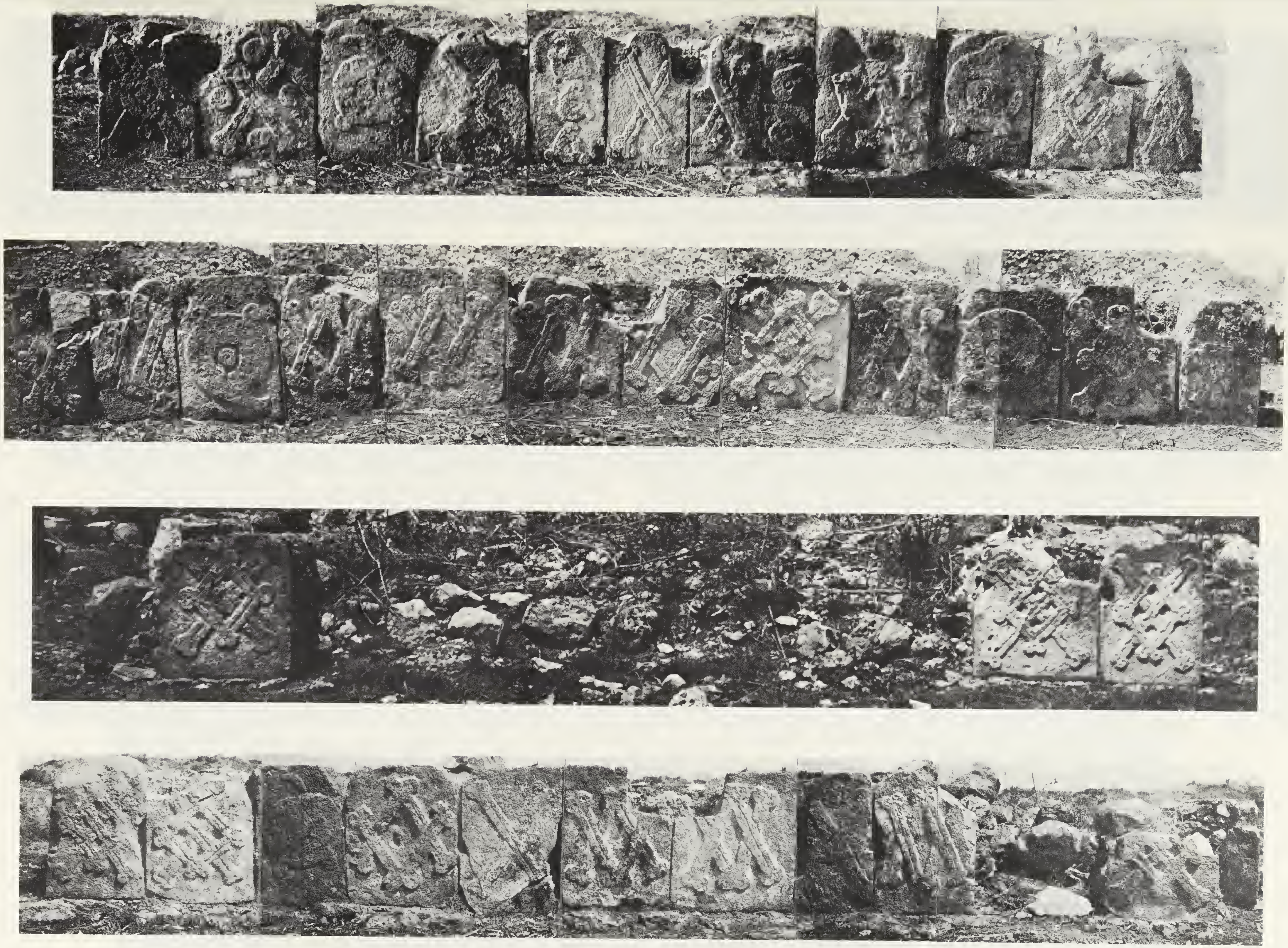


Figure 410. Uxmal, Cemetery Group, Sculptured Platform 2. North, east, south, west sides (from top to bottom).

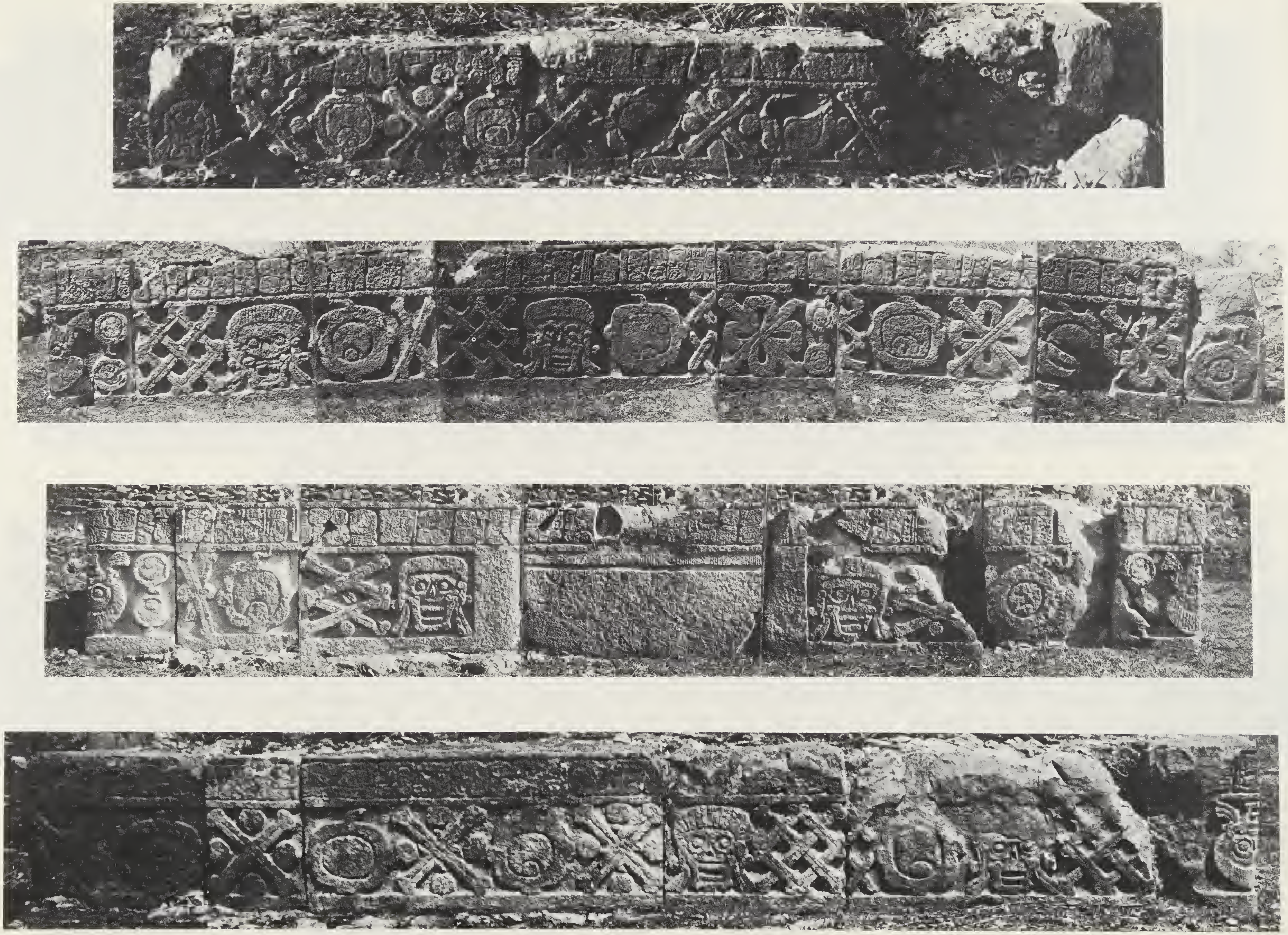


Figure 411. Uxmal, Cemetery Group, Sculptured Platform 3. North, east, south, west sides (from top to bottom).

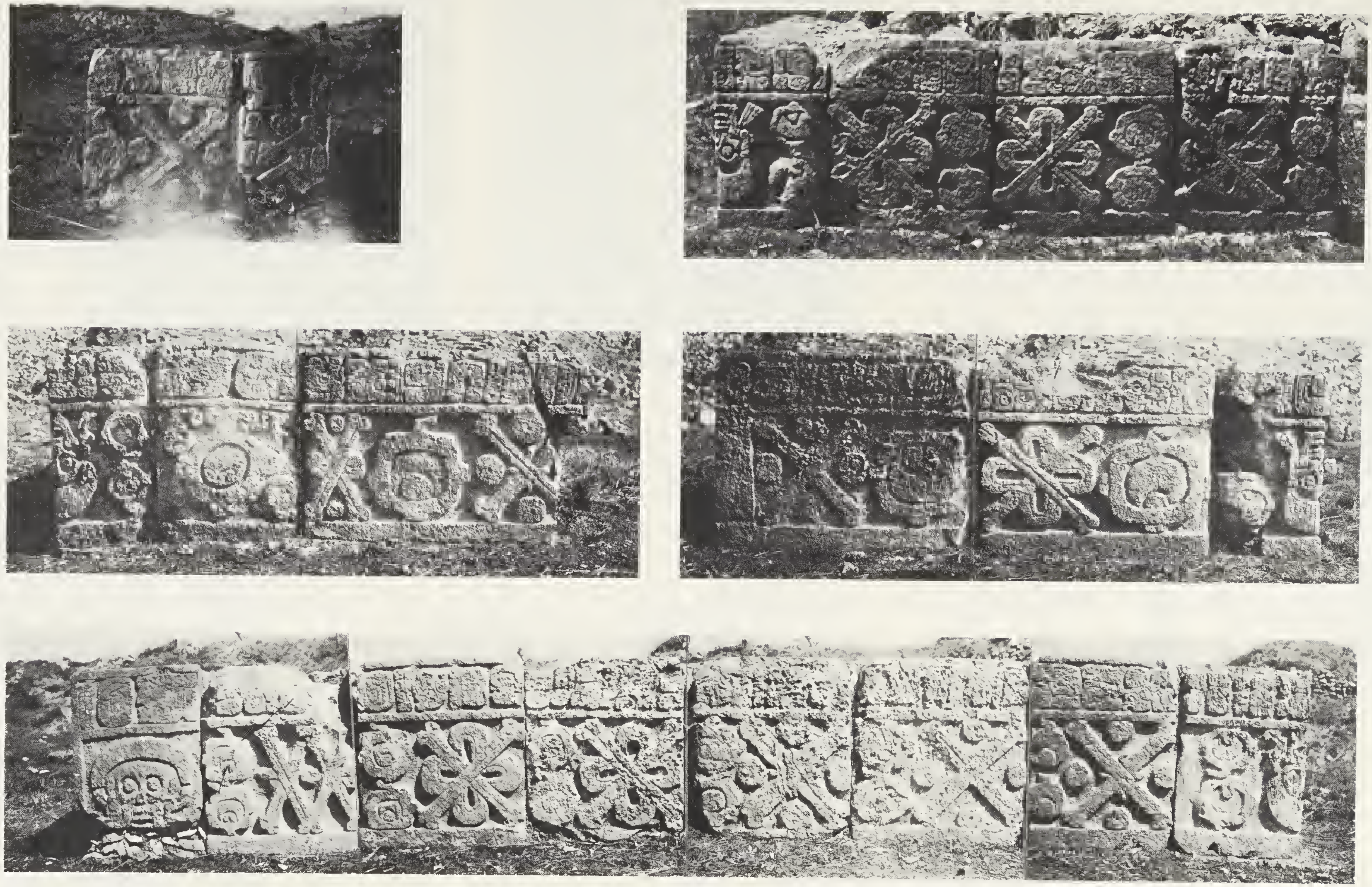


Figure 412. Uxmal, Cemetery Group, Sculptured Platform 4. North, east, south, west sides (from top to bottom).

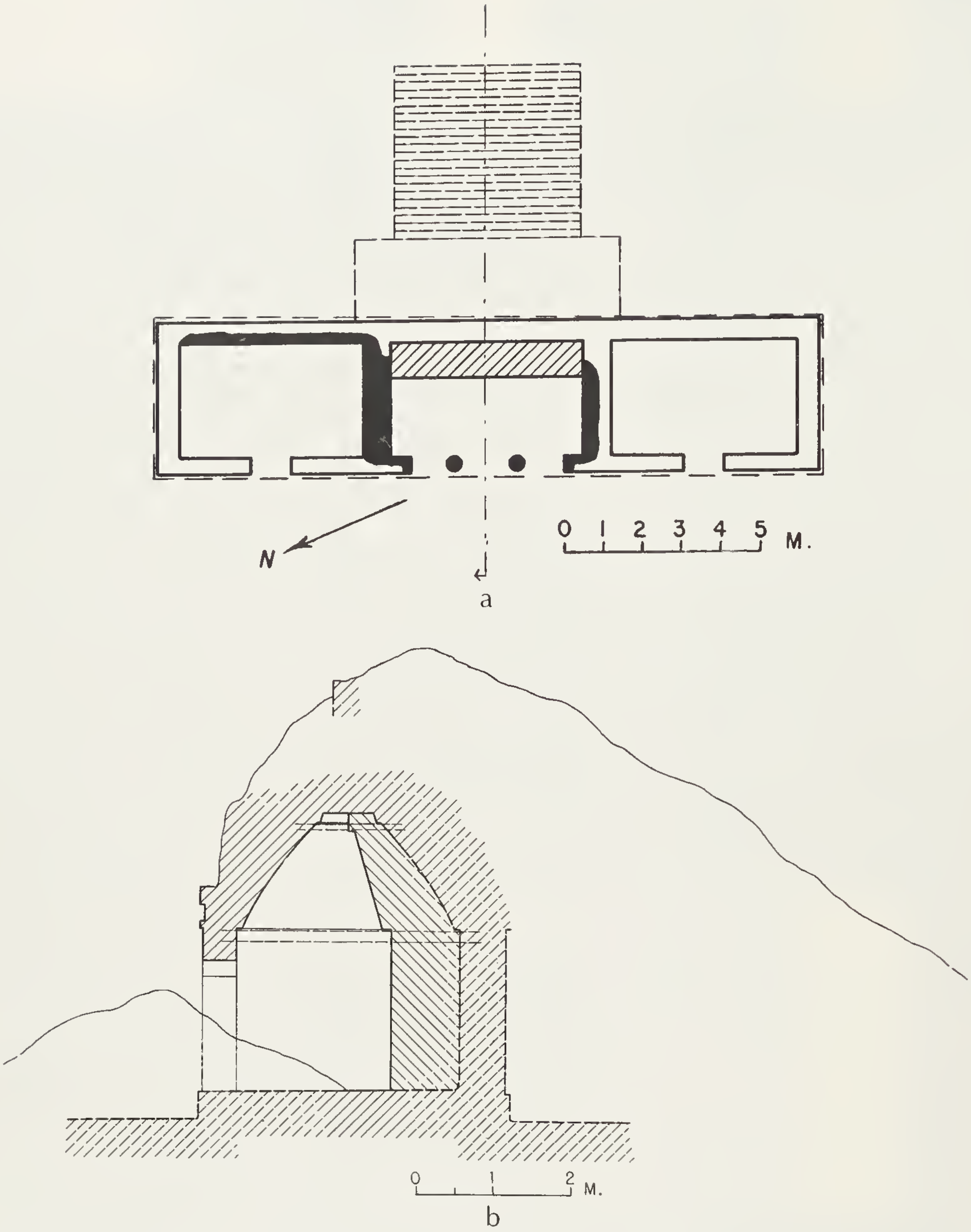


Figure 413. Uxmal, Group of the Columns, Temple of the Columns: a, plan; b, section through middle room.

Two stone lintels and an approximately square stone pillar in debris in front of central room, plus square pillar (fig. 414a) on roof, suggest multiple entrance to second-story structure (see below).

Vaults and Beams. Vault wide in proportion to height (fig. 413b) with considerable curve to concave soffit slopes. Long rough capstones, but masonry otherwise normal (fig. 415b).

Originally two beams immediately below spring of vault in center room and four beams in course below small offset under capstones.

Second Story. Structure seems to have rested on roof over central room and possibly over stair landing at rear. Comparatively small amount of debris on roof but great pile on ground before building would seem to have come from second story (fig. 415a). Although impossible to determine character of second-story structure without excavation, lintels and pillars in debris (see above) suggest room with multiple entrance facing west.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Block of masonry forming new rear wall and vault soffit built secondarily in central room (figs. 413b, 415b). Purpose presumably was to support second-story construction which endangered wide low vault of lower story.

Stairway and hypothetical stair landing at rear (east) of building also presumably secondary to lower rooms (fig. 413a).

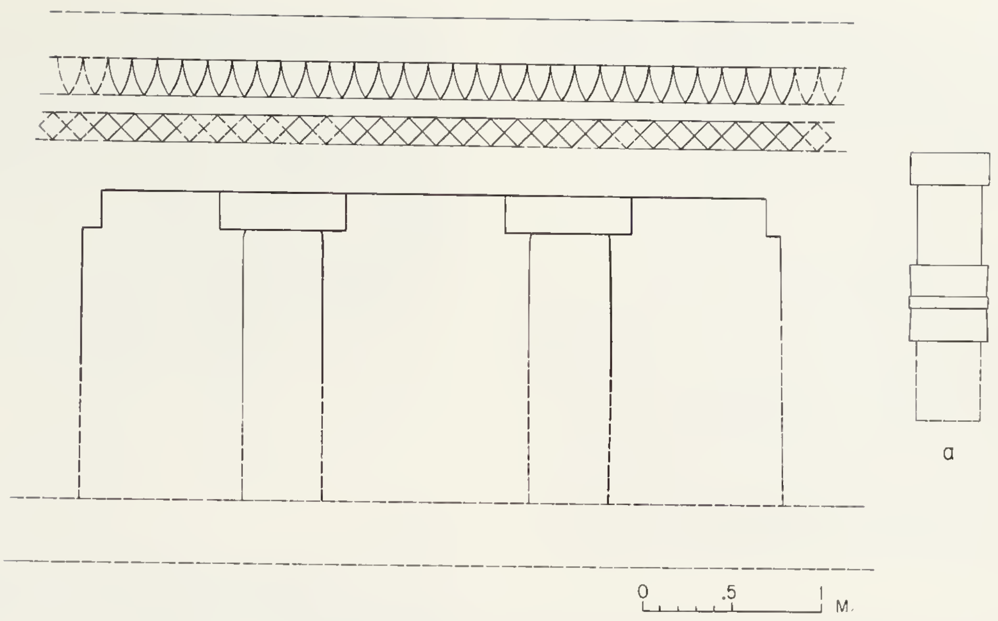
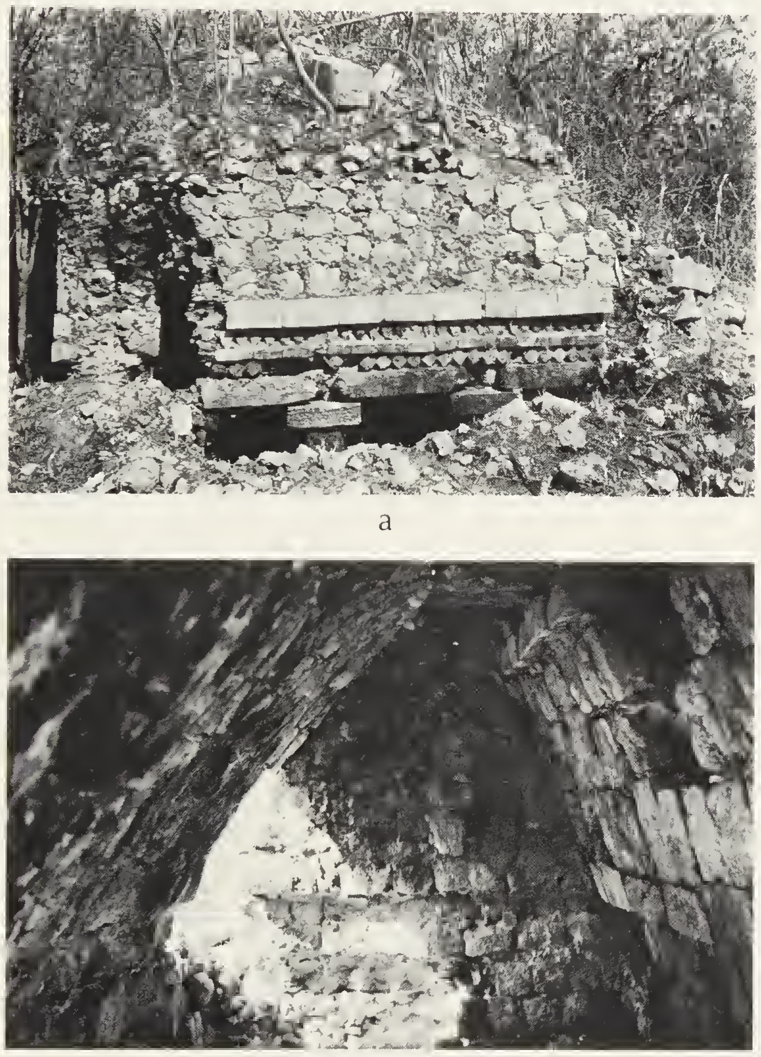


Figure 414. Uxmal, Group of the Columns, Temple of the Columns. Elevation of entrance to middle room: a, rectangular pillar in debris on roof (see fig. 415a).


a

b

Figure 415. Uxmal, Group of the Columns, Temple of the Columns: a, central section of building, looking east, and showing great pile of debris before columnar entrance to middle room; note fallen rectangular pillar on roof; b, vault of middle room, looking north, and showing secondary masonry at right (see fig. 413).

* NUNNERY QUADRANGLE

(Nunnery, House or Quadrangle of the Nuns,
Cour et Palais de Vestales)

This great quadrangle and enclosed court has to a large extent been excavated and rebuilt by archaeologists of the Mexican Government. Being one of the most important architectural complexes at Uxmal, it has been described and pictured many times, unfortunately not so adequately since the work of restoration as before. The Nunnery Quadrangle is treated in all the works dealing with the architecture of Uxmal cited above (p. 212), and to this list may be added: Barrera 1950, pls. 52–64, 68–70; Blom 1930, 1932a, 1934, 1946; Hissink 1934; Ruppert and Smith 1957; Ruz 1955a,b; Spinden 1920; Tulane University 1932. Attention is also called to the preceding section on dates at Uxmal (pp. 209–212), which involves the Nunnery Quadrangle.

I mentioned at the beginning of this section on Uxmal (p. 208) that I did not make a detailed study of the Nunnery Quadrangle but had to content myself with cursory notes. Since these notes were made when the work of restoration had barely begun, and since they are short, I give them here on the chance that they may include some information not previously recorded and later lost in the process of reconstruction. Obviously, the notes will be of value mainly when used at the site or in conjunction with the illustrations and descriptions in the references cited above.

Miscellaneous Sculpture 13, a badly broken stone jaguar, comes from the great courtyard of the Nunnery (see Miscellaneous Sculpture, below).

Two monuments are, or were, associated with the Nunnery Quadrangle. Stela 17 stands at the center and near the bottom of the great stairway leading from the court to the North Range, and Stephens (1843, 11:308) observed the fragments of a column altar, or picote, lying at the center of the court (see Monuments, below).

SUPERSTRUCTURE

Base Moldings. Plain molding of single course of stone on South Range.

North Range carries three-member molding with groups of three very large colonnettes separated by plain zones in middle member. Primary buried base molding nowhere visible.

East and West Ranges have three-member base molding with groups of four colonnettes in middle member (cf. House of the Old Woman, fig. 443, and Unfinished Building, fig. 449b,c).

Floors. Much darker than usual buff color. Quite reddish.

Walls. South Range walls much the lightest, outer walls running .61–.62 m thick.

Doorways. South Range has simple entrances of normal Puuc design, but a question as to character of lintels. None remaining in place and none in debris. Doorways narrow but may well have had wooden lintels. (Stephens 1843, 1:300, reports wooden lintels.) Jambs normal Puuc.

North, East, and West Ranges have doorways with wooden lintels and pilaster style jambs. In North and West Ranges pilasters built of usual large jamb stones. East Range originally the same but pilasters restored with small stone.

Lower North Rooms have jambs like North Range. No lintels visible. Large square columns in doorways uncommon.

Wall Openings and Projections. No wall openings observed. Ring cordholders in all ranges. No other kind observed. Rings and some other kind of projection probably occurred on outer walls.

Vaults. Distinct tendency to straight rather than usual concave soffit slopes. Greatest curve in vaults of West Range, but not great.

Specialized vault stone in all ranges. Stone in South Range least specialized. Stone in West Range like that in North Annex (Northern Long Building; see below). Vault stone in East Range not visible in profile, but probably like that in West Range. Stone in North Range intermediate in specialization between that in South and West Ranges.

Moldings. Simple three-member medial and cornice moldings on South Range.

North Range carries simple three-member medial molding and cornice molding of lowest apron member, then row of colonnettes, then rectangular member, and very high reverse apron of three courses of stone as top member.

East Range shows both medial and cornice moldings of lowest apron member, then colonnettes, then rectangular member, and finally reverse apron member.

West Range has medial and cornice moldings of simple three-member variety.

Lower North Rooms probably carried simple three-member medial and cornice moldings.

Topmost member of all cornice moldings usually larger than other members and often made of more than one course of stone.

Roof Structure. Towers of masks on North Range comparable to roof structure.

Masks on South Range interrupt cornice molding, but do not seem to have risen above level of roof.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Small buildings at each end of South Range are secondary to main building. West-end building on same level and possibly part of West Range (but all plans show space between west-end building and West Range). East-end building, according to Seler (1917, p. 34), on terrace of East Range.

Lower rooms on north side of court seem earlier than North Range platform, but platform enlarged, as seen at northeast corner, so cannot be certain of sequence here. Eastern lower rooms next to stairway seem secondary to adjacent rooms further east.

Building the secondary facade of North Range entailed tearing down old upper-facade facing and removing top member of medial molding.

Masonry technique suggests South Range the oldest. Hard to place other ranges in order but North Range possibly next. North, East, and West Ranges all give impression of being very late. (Note that this sequence is based on assumed development of masonry technique only, and that lower rooms on north side of court are not included.)

Northern Long Building

(Nunnery North and South Annexes)

The name Northern Long Building was Seler's name (1917, p. 119) for the structure that lies immediately east of the North Range and of the northern half of the East Range of the Nunnery Quadrangle (figs. 388, 389). On the Tulane University plan of the Nunnery Quadrangle (see Blom 1934, pl. 1) it is labeled North Annex and South Annex. There is no reason to believe that the building had any functional association with the Nunnery, at least in the final stages of these structures, so the Tulane name seems a poor one, and I prefer Seler's designation.

I find the location, orientation, and association of this building with nearby structures difficult to understand. As will be discovered below, the transverse vault that separates the north and south rooms was once a passage, but one that led nowhere on the west, where the building is squeezed against the substructural terrace of the Nunnery

Quadrangle, and to no currently discernible point of interest to the east. I believe the structure is best explained as having been erected as part of an earlier grouping of buildings, which may or may not have been completed, but in any case the design of which is now obscured by the great Nunnery Quadrangle. In its final stage, with the central passage closed at its west end, the structure clearly faced east and is more likely to be associated with the House of the Magician complex than with the Nunnery.

PLAN

See figure 416a, and see Secondary Construction . . . , below.

SUPERSTRUCTURE

NORTH ROOMS AND OLD PASSAGEWAY

Plan. See figure 416a, and see Secondary Construction . . . , below.

Section. See figure 416b.

Elevation. See figure 416c.

Base Molding. Nowhere visible. Simple molding assumed.

Floor. Carries dark stain but probably was normal buff color. Rise in floor level of rear room assumed.

Walls. Medial wall .73 m thick at jamb, south end wall .78 m, rear (west) wall about .95 m thick. Facing stone

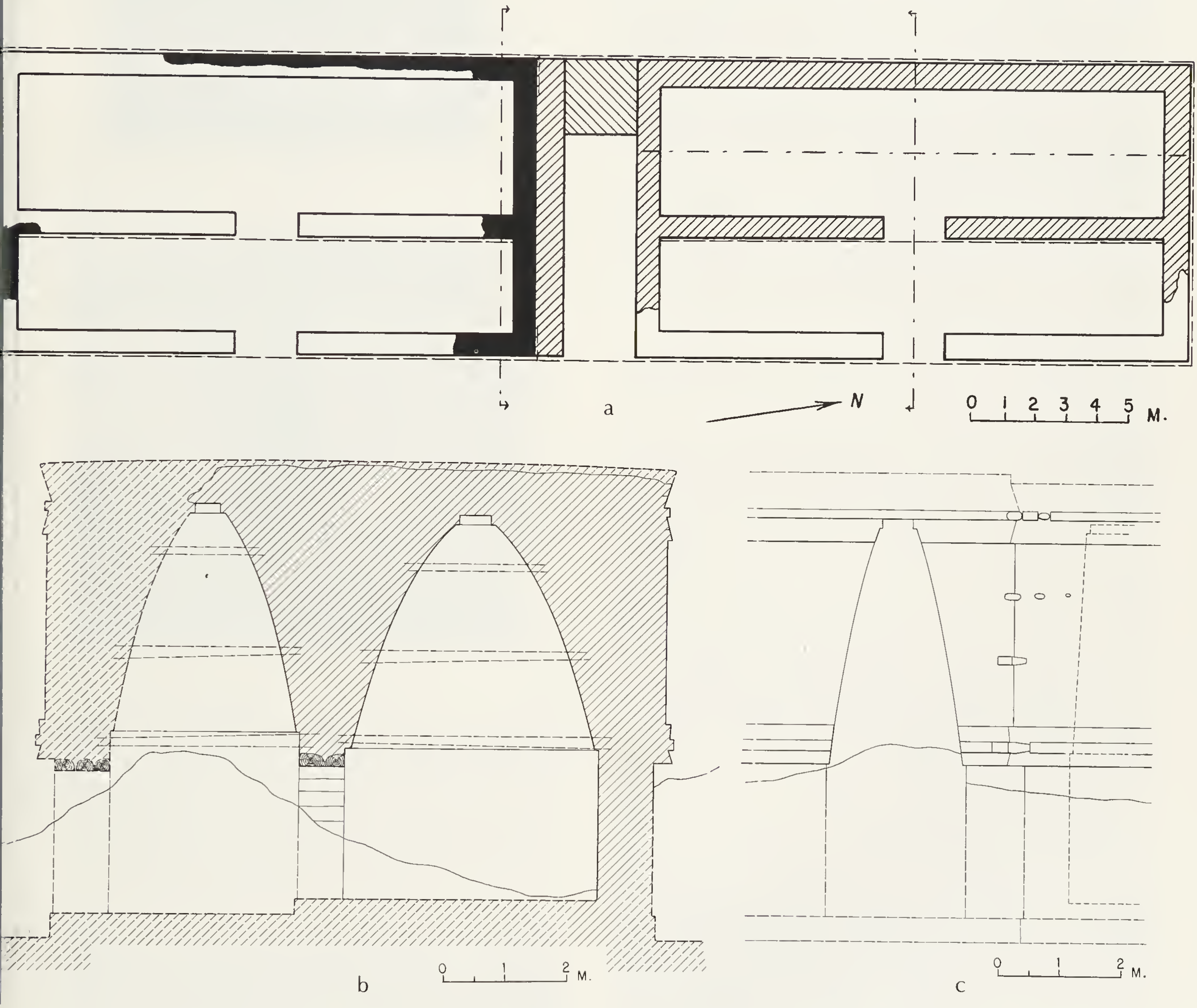


Figure 416. Uxmal, Northern Long Building: a, plan; b, east-west section through North Rooms; c, elevation of west end of Old Passageway and juncture with South Rooms.

finely cut, dressed, and fitted (fig. 417a). Stone rather large, commonly about .40 by .40 m on the face.

Usual construction level just below medial molding and at top of lintels.

Doorway. Doorway in medial wall only one visible. Full-width jamb stones, each stone not very high, and a number needed to complete jamb (fig. 416b). Wooden lintel of two beams still standing (fig. 418a).

Wall Depression and Projection. One cordholder of single-tongue variety observed. Small stone peg set in mortar in one hole.

Bench. May have been a bench, now destroyed, across east face of wall blocking west end of passageway.

Vaults and Beams. Vaults notable for size, that at west averaging 4.10 m in width (figs. 416b, 418a; and see Pijoan 1946, fig. 802). Curve of soffit slopes about average for Puuc vaulting. Vault ends very steep, only .15 m from vertical (fig. 418b). Finely dressed and fitted vault stone, highly specialized. (fig. 417b).

Beam sockets well cut and vary in size to receive butt end or small end of beam (fig. 418b).

Moldings. Simple three-member moldings (figs. 416b,c, 417a). Judging by height of roof debris, top member of cornice molding made of three courses of stone and probably about .60 m high.

Decoration. None visible, other than moldings. Stephens (1843, 1:312) reports paintings in one room but does not say which one.

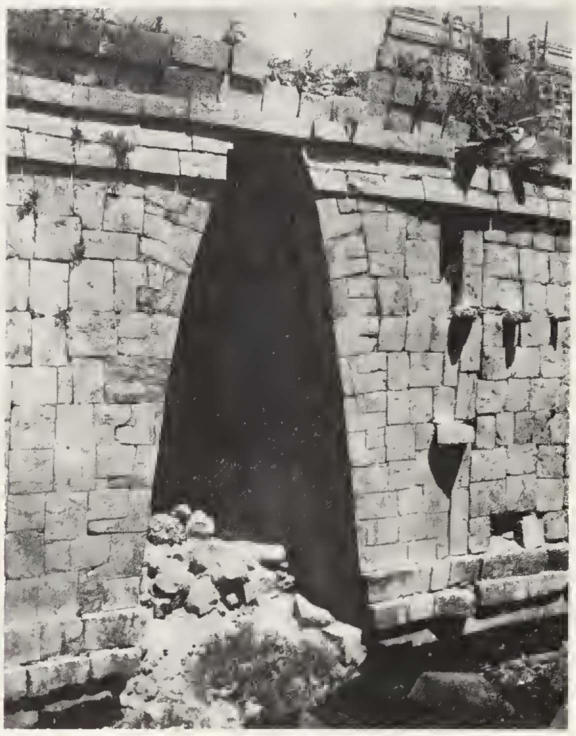
Secondary Construction and Building Sequence. Northern rooms and old central passageway are contemporaneous and are secondary to southern rooms. Masonry blocking west end of passageway is secondary to passageway and tertiary in complete building sequence. Stephens, who undoubtedly found the west end of this passage in better condition than it is today (fig. 417a), gives a drawing (1843, 1:430) showing a narrow vault that seems to roof a sort of niche in the secondary, blocking masonry. I was unaware of the Stephens illustration when I made my plan and elevation (fig. 416a,c), but I am inclined to trust it. If the "niche" were closed at the west, the resulting chamber might have been a tomb.

SOUTH ROOMS

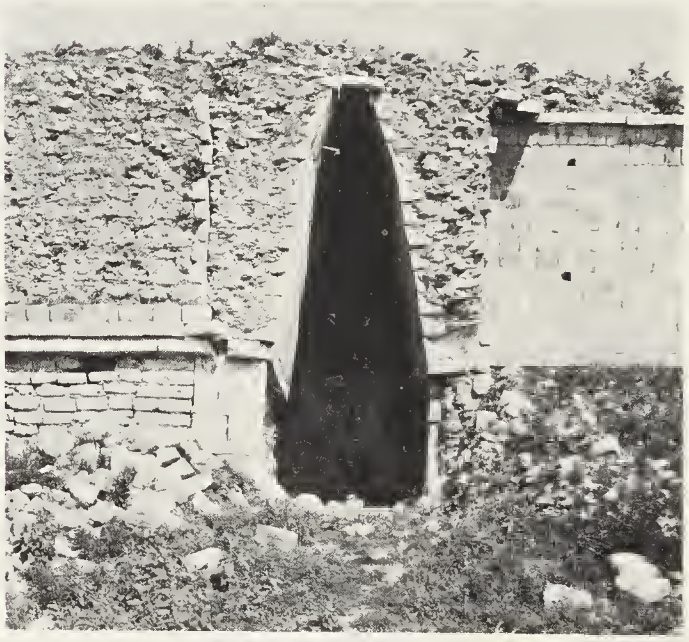
Plan. See figure 416a.

Section. See figure 419b.

Walls. Below medial molding, walls are made of slabs that penetrate full thickness of wall. Stone is fairly well shaped and roughly dressed on outer ends (fig. 417b), but little attention to fitting, and inner ends not dressed and only roughly shaped. Masonry somewhat better than that of upper story of Structure 6 in North Group (see p. 215) but technique essentially the same. Upper facade faced with well-cut and dressed-veneer wall stone typical of better class of Puuc construction (fig. 417a).



a



b

Figure 417. Uxmal, Northern Long Building, Old Passageway: a, west end, looking southeast, and showing debris of masonry blocking passageway, and half-buried north-west corner of South Rooms (cf. fig. 416c); b, east end, looking west, and showing lower wall masonry of South Rooms, line of buried north facade of South Rooms, and part of vault face in North Rooms.

Vaults. West vault has span of 4.35 m at north end (fig. 419b) and is widest Maya vault known to me, with exception of vaults over blocked passageways in Governor's Palace (see below), which seem to be about same width, and vault covering the gallery of the Mercado in Chichen Itza (see Ruppert 1943, p. 242), which seems to

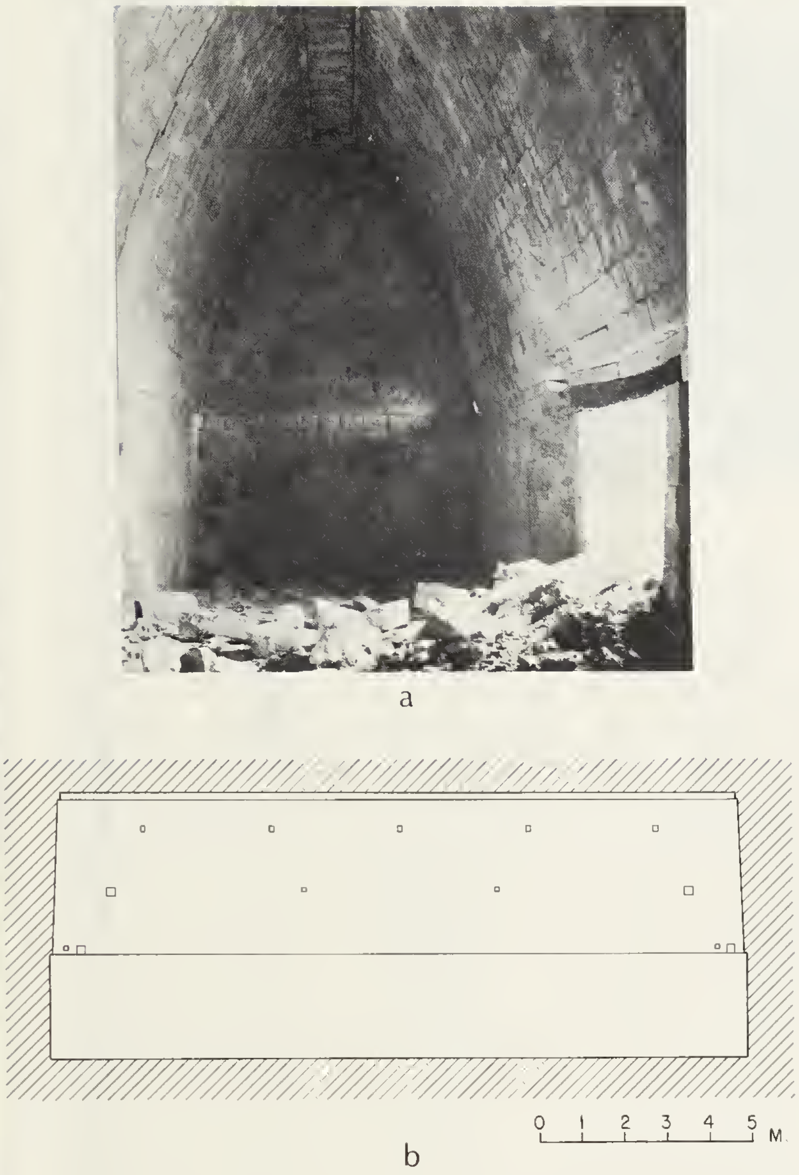


Figure 418. Uxmal, Northern Long Building, North Rooms. West room: a, view of room, looking north; note wooden lintel in doorway; b, longitudinal section, and elevation of west side of room.

be slightly wider. Well-cut, well-fitted, specialized vault stone (fig. 419a) not quite equal in degree of specialization to stone in north rooms.

Moldings. Like those of north rooms, with possible exception of top member of cornice molding, which may have been of two courses of stone with total height of about .45 m (figs. 416c, 419b), but not certain.

Decoration. Projecting stones in upper zone of west facade and at old, now half-buried, northwest corner (figs. 416c, 417a) that presumably supported decoration of some sort. Also see Stephens reference above (North Rooms).

Secondary Construction and Building Sequence. Southern part of structure an earlier building than old passageway and north rooms. This clearly shown by buried wall that once formed north facade of earlier building (figs. 416a,c, 417).

House or Temple of the Birds

East of the Nunnery Quadrangle and southeast of the Northern Long Building rises the great Pyramid of the Magician (fig. 388; and see Blom 1934, pl. 1). Between the pyramid and the Nunnery is a closed court surrounded by badly ruined structures of which that on the west, the House of the Birds, is the only one offering any visible architectural details. The courtyard obviously formed the western approach to the House of the Magician in its later stages, but there is reason to believe that the court and its surrounding buildings once were a low quadrangle, of which the relatively early Lower West Building of the House of the Magician (see below) formed the east side (see Seler 1917, pp. 81–82; Foncerrada 1965, pp. 165–169). This suggests a date for the quadrangle, and presumably for the House of the Birds, approximately the same as that of the Lower West building (see p. 211).

Ruz (1955a, p. 56) reports the remains of a rectangular platform, or *adoratorio,* at the center of the courtyard, adding that it had been dug into at some time in the past. Stephens (1843, 1:312) noted a column altar, or picote, also at the center of the court. The monument (Altar 2) is apparently no longer there.

Seler (1917, p. 79) describes the House of the Birds as two buildings connected by a passage vault. When I studied the structure, it seemed to me that the contours of the debris indicated the plan given below, but the possibility of a central, east-west passage, presumably vaulted, between the northern and southern parts of the building should certainly be considered. Indeed, this seems the most natural point of approach to the court and to the Lower West Building or later stages of the House of the Magician.

SUPERSTRUCTURE

Plan. See figure 420a.

Sections. See figure 420b.

Elevation. See figure 420b. Partially restored.

Base Molding and Floor. Nowhere visible.

Walls. Run about .75 m, possibly up to .80 m, thick. Typically Puuc but with poorly dressed, poorly fitted, inner facing stone, and somewhat better cut and dressed, but poorly fitted, outer wall stone (figs. 421, 423). Usual plaster layer showing break in construction below medial molding.

Doorways. Only doorway between Rooms 1 and 2 is visible (figs. 421a, 422). Jambs primarily a cornerstone type of construction, like those in the Central Western Building at the Cemetery Group (see above), but at least one stone runs full width of jamb. Slight narrowing of doorway from bottom to top. Wooden lintels and one beam .55 m wide in cross-section still standing.

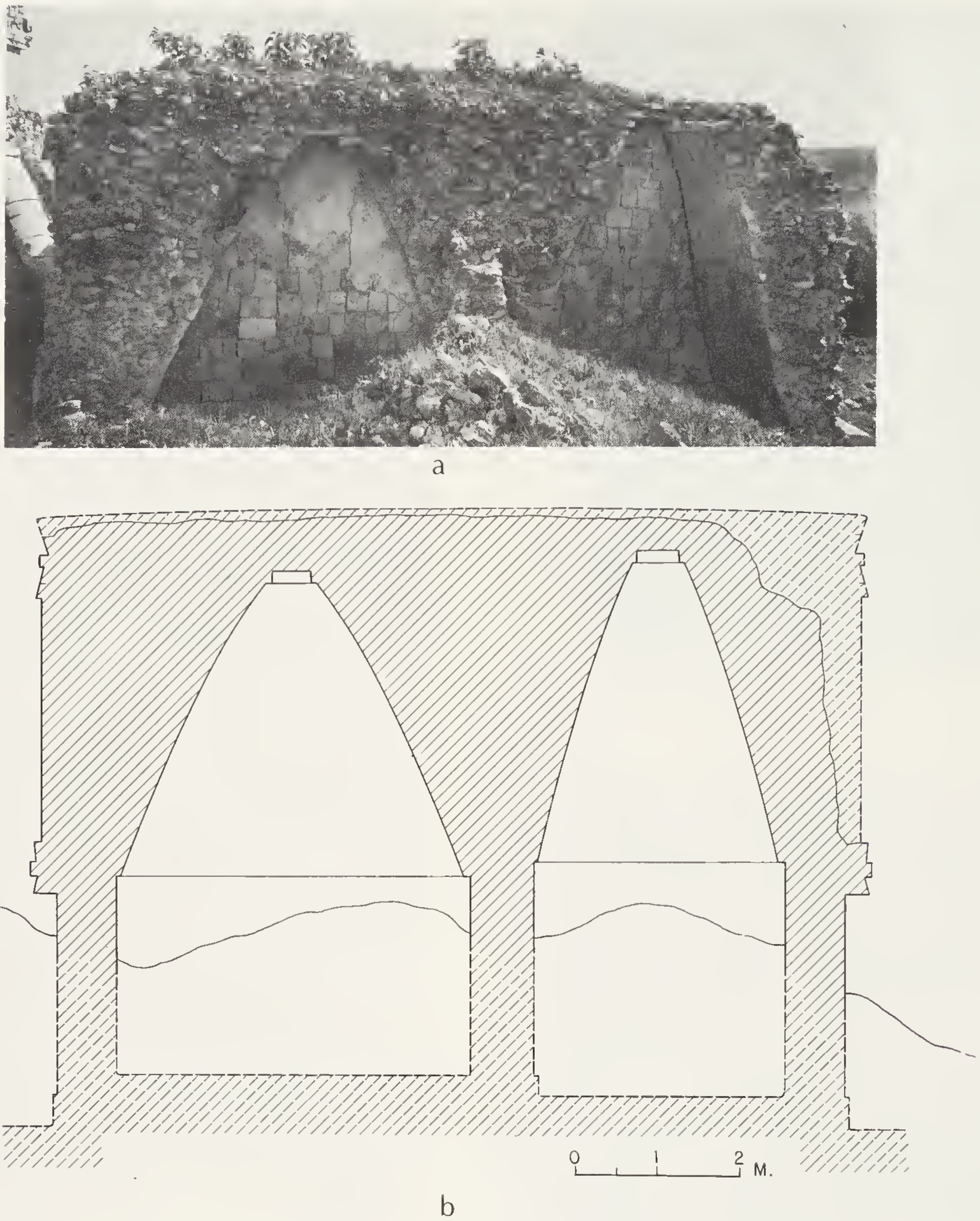


Figure 419. Uxmal, Northern Long Building, South Rooms: a, north end of rooms, looking north, and showing vaults in section; b, transverse section.

Wall Openings. Seem to have been small square windows below medial molding that were later blocked with masonry. Openings possibly used as socket for tenon of some outside wall projection.

Wall Depressions. None visible.

Vaults and Beams. Considerable curve to soffit slopes (figs. 420b, 421b) with bare suggestion of bottle-neck shape in Room 2 (fig. 421a). Cutting, dressing, and degree of specialization of vault stone all about average.

Arrangement of vault beams in Room 2 shown in figure 422.

Moldings. Three-member medial molding with colonnettes in middle member on all but Rooms 3 and 7 (figs. 420b, 421c). No cornice molding in place, but probably duplicated medial molding with addition of usual reverse-apron coping course.

Rooms 3 and 7 carry feather and crescent decorative elements in place of usual moldings (figs. 420b, 423). None of cornice molding on these rooms now standing, but apparently was one stone in Seler's time (1917, fig. 76).

Decoration. Lower wall zone plain. Upper facade zone of all but Rooms 3 and 7 carries decoration of banded colonnettes (figs. 420b, 421c). Bird and feather decoration on upper facades of Rooms 3 and 7 (figs. 420b, 423).

In Room 2 there is red paint on offset at spring of vault, on offset below capstones, and at juncture of soffit slopes and end walls. Suggests red band outlining, or making a panel of, vault face, but entire soffit could have been painted red.

According to my notes, black-line frescoes that may have been hieroglyphs on cream or buff colored plaster on wall below spring of vault in Room 2. Seler (1917, p. 79)

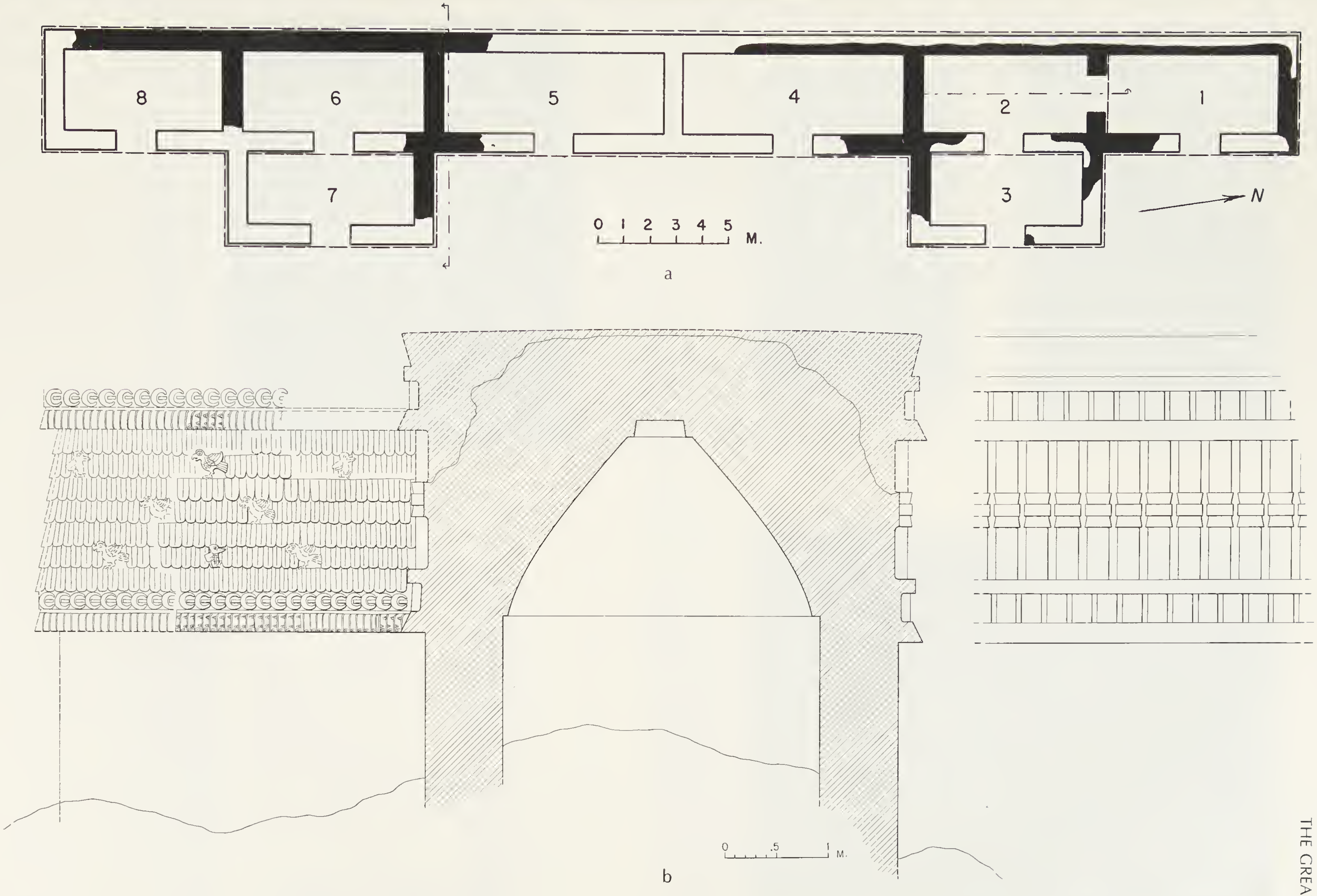
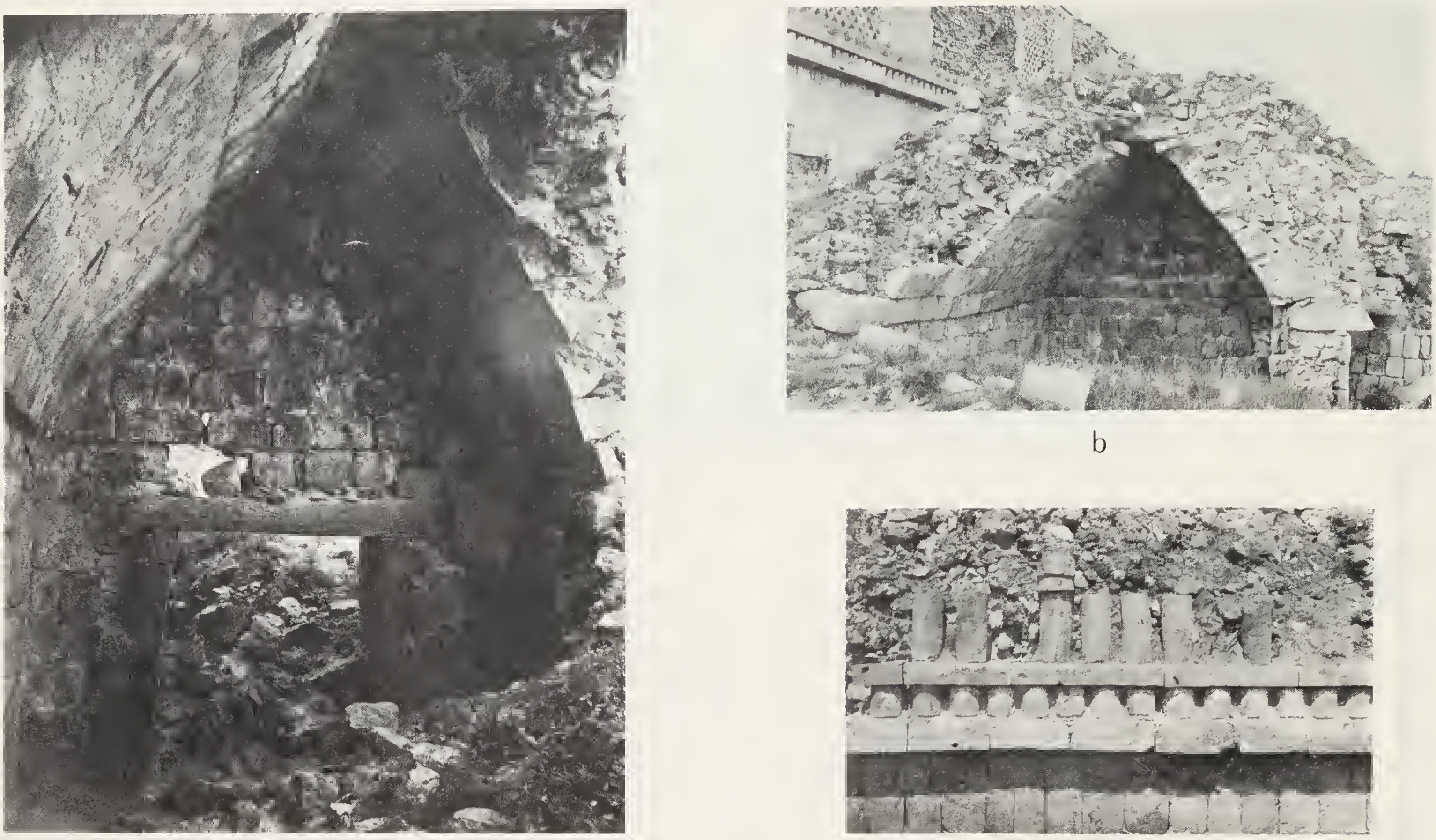


Figure 420. Uxmal, House of the Birds: a, plan; b, restored elevation of north facade outside Room 7, east-west section through Room 5, and restored elevation of west facade outside Room 6.



a

b

c

Figure 421. Uxmal, House of the Birds: a, Room 2, looking north, and showing doorway to Room 1 spanned by wooden lintel; b, Room 4, looking north, and showing vault in section; c, part of west facade outside Room 6, looking east, and showing medial molding and remains of banded split columns (cf. fig. 420b).

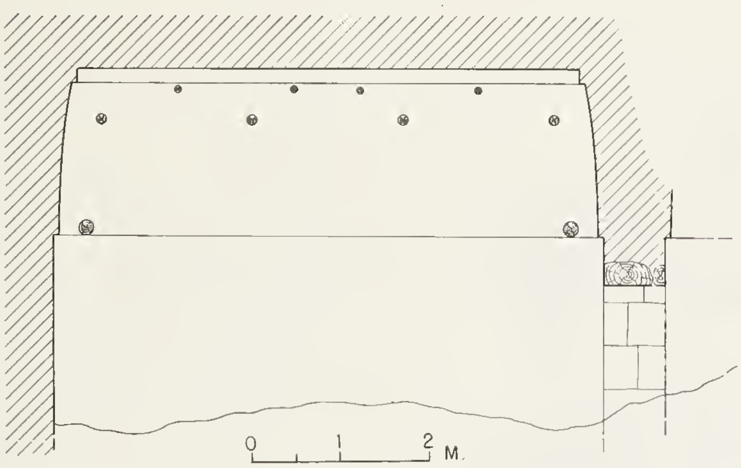


Figure 422. Uxmal, House of the Birds. Longitudinal section through Room 2 and north doorway, and elevation of west side of room.

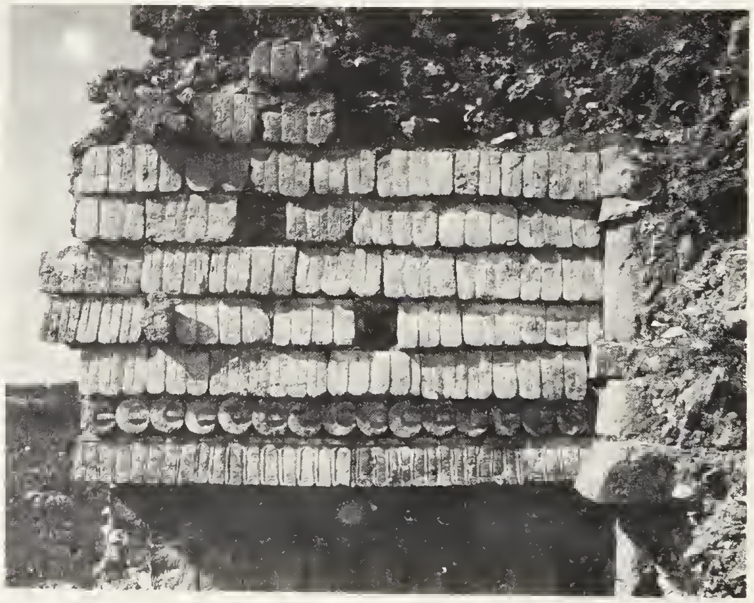


Figure 423. Uxmal, House of the Birds. Remains of north facade outside Room 7, looking south, and showing upper zone decoration. Note medial molding and split columns (in section) on east facade of Room 5 (cf. fig. 420b).

records these as definitely hieroglyphs, one being a clear 9 Ahau, and says they were done in red.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Nothing to indicate that structure was not the product of a single period of construction.

House of the Magician

(House or Temple or Pyramid or Castillo of the
Magician or Diviner or Sorcerer or Prophet or
Dwarf, Pyramide de Kingsborough)

As explained above, this great temple pyramid lies east of the Nunnery Quadrangle and on the east side of a courtyard that with its surrounding buildings occupies the space between the two major architectural complexes (fig. 388; and see Blom 1934, pl. 1). The Pyramid of the Magician is one of the most important structures at the site, and quite naturally has received the attention of numerous writers. All of the general references cited (p. 212) for Uxmal describe the pyramid, and to those may be added Hissink's (1934) study of the masks and Ruz's (1955a and 1955b) account of excavation and restoration. The section dealing with dates at Uxmal (p. 211) also refers to the House of the Magician.

As previously mentioned, my work did not include so careful a study of this important structure as would have been desirable. The most casual examination revealed a long sequence of architectural changes and additions that could be exposed and studied only by large excavations. Since my 1936 visit to Uxmal the Mexican Government has carried on much work of this nature, exposing architectural increments, notably the Inner East Temple and a rear room of the Inner West Temple, and elucidating constructional details not seen by me (see Mexico 1956a, pp. 5–13; Foncerrada, 1965, pp. 153–163; Sáenz, 1969). A vast amount of reconstruction and consolidation of crumbling masonry has also gone forward. Once more I include my notes, cursory though they may be, on the chance that some details may have been recorded that are now lost. As mentioned in connection with the Nunnery Quadrangle, the notes will be of value chiefly when used at the site or with the illustrations and descriptions in the references cited above.

Seven pieces of sculpture, M14–20, are associated with the House of the Magician (see Miscellaneous Sculpture, below).

I have already mentioned Altar 2 in the court between the House of the Birds and the House of the Magician (see Monuments, below).

SUBSTRUCTURE

Construction. Pyramid is faced with cut but undressed stone, except for top rectangular platform where dressed stone used. Facing stone varies somewhat between block and slab in proportion but not greatly.

Ends of pyramid not truly rounded, as sometimes shown, but flat with tremendous curve in place of usual rectangular corner. At northwest and southwest, rounded buttresses give trilobed plan to corners of pyramid (fig. 424). Buttresses rest on roof of Lower West Building and rise to merge with rounded face of pyramid. Odd design probably to avoid placing great weight on lower vaults as would have been done by simple rounding of corners, as at northeast and southeast.

Can see only one period of construction of pyramid up to platform of West Temple. May be an inner structure, but it does not show. Question of stairway to Inner West Temple. Rounded buttresses at northwest and southwest give pyramid look of two periods, but examination shows joints of buttresses and pyramid walls to be contemporaneous.

Pyramid next heightened to level of bottom of rectangular platform on which topmost temple rests. This upper terrace later lengthened with addition of same type of rounded ends. Last built was rectangular platform. Stairways during these periods a question, except that west stairway presumably was built between first and second phases of construction outlined above.

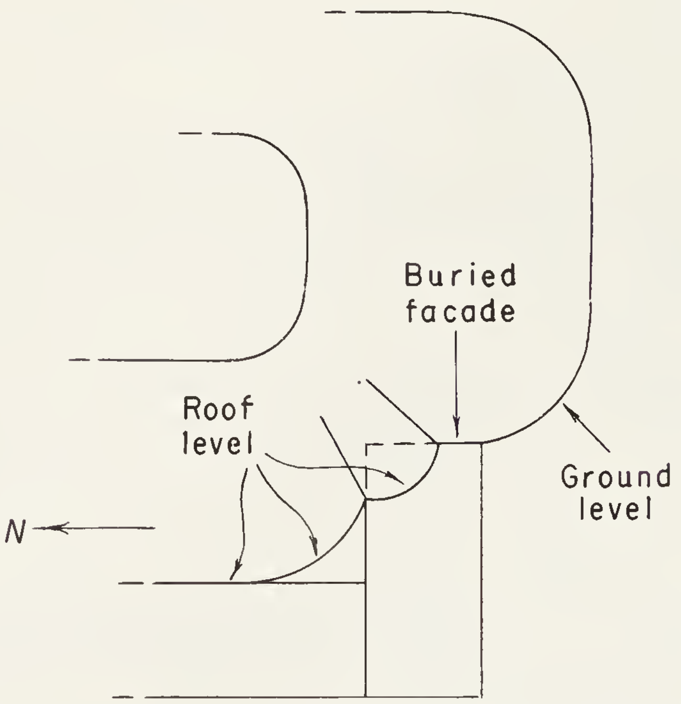


Figure 424. Uxmal, House of the Magician. Sketch plan of southeast quadrant of pyramid.

SUPERSTRUCTURE

LOWER WEST BUILDING OR TEMPLE

Seems to antedate pyramid, since the east facades of the end rooms are buried intact. Do not know what was behind (east) visible rooms; may have been other rooms or substructural platform.

Walls. Well-dressed and shaped, but poorly fitted, outer facing stone. Crude, poorly dressed inner facing of normal Puuc quality. Front wall .81 m thick at doorjambs.

Doorways. Normal Puuc jambs of full-width stones. Wooden lintels, two beams to each doorway.

Vaults. Rather well-cut, dressed, and fitted stone of average specialization.

Moldings. Both medial and cornice moldings highly decorated.

Secondary Construction and Building Sequence. Some rooms partly filled, others completely filled, with rough masonry. Presumably done at time of construction of pyramid.

INNER WEST BUILDING OR TEMPLE

Apparently associated with original pyramid. Edge of pyramid platform or terrace falls about on line of doorjambs of outer temple, thus allowing an average terrace width before inner temple building. Stairway to inner building a question. Also question what may have been east of building.

Walls. Inner facing normal Puuc. Outer facing better but cruder than might be expected. Front wall .60 m thick at jamb.

Doorway. Only one jamb stone remaining. Normal Puuc.

Wall Openings. Small square windows, later blocked, below medial molding.

Vault and Beams. Normal Puuc in every respect but sloppy workmanship. Fairly well-cut vault stone of average specialization, all usual offsets at spring and below capstones, considerable curve to soffit slopes, three beams below offset course under capstones, two beams in spring course.

Moldings. Two-member medial molding with two courses in apron member. Cornice molding the same plus normal coping member.

Decoration. Sloped upper facade zone with tenons that presumably supported decoration. Also tenons in cornice molding.

Secondary Construction and Building Sequence. Rear half of room filled with masonry, presumably at time of construction of Upper Temple, but possibly when Outer West Temple was built.

OUTER WEST BUILDING OR TEMPLE OR CHENES TEMPLE

To be associated with present west stairway, there being insufficient room for temple without stair landing. No indication of change in pyramid. Outer temple completely encases inner temple which becomes rear room or sanctuary.

Base Molding. Probably plain but uncertain.

Walls. Inner facing stone about same quality as outer facing of Inner West Building, but stone runs somewhat larger. Outer wall stone well dressed, fairly well cut, not very well fitted. Walls very high to level of spring of vault, over 4 m. Heaviness of walls probably due mainly to decoration.

Doorway. Pilaster form of jambs in accordance with dragon-mouth entrance. Jamb stones of normal Puuc design. Wooden lintels, two inner beams, and one outer beam at higher level.

Wall Depressions and Projections. Cordholders of two-tongue variety. Ring cordholders located just below spring of vault.

Vault and Beams. Vault approaches best quality. Stone well cut, dressed, and fitted. Soffit slopes flat.

Two beams in course forming spring of vault, three beams below small offset under capstones.

Moldings. Medial molding is apron member, formed of single course of stone with carving on sloped surface. Stone cut so as to leave small ring projecting from underside. A ring on nearly every stone.

Cornice is simple three-member molding, the apron member made of two courses of stone.

Decoration. A purely cut-stone technique with no apparent need for plaster covering, although plaster presumably was used. At places a rounding of cut-stone surfaces (e.g., eyes and under eyes above doorway) that may be in simulation of stucco technique (see p. 143).

Secondary Construction and Building Sequence. With heightening of pyramid (see Substructure, above) rear (east) part of building was buried. Narrow (ca. 2.5 m), very steep staircase leading to upper platform built at each side of building.

UPPER BUILDING OR TEMPLE

Follows two periods of substructural changes after completion of Outer West Building. Upper rectangular platform presumably built to support Upper Temple and of same period. What appear to be earlier walls underlie transverse walls of Upper Building.

Base Molding. Three-member molding with middle member of colonnettes on north, south, and east sides of building and at ends of west side. (I think this is an error. Photos seem to show a higher fourth reverse-apron member.) At center of west side no colonnettes, but all members carry carving. Points at which base molding changes coincide with vertical breaks in wall masonry and raise question whether temple was originally planned shorter. (Note lengthening of upper terrace of pyramid. See

Substructure, above.) On other hand may be due to different (i.e., carved) exterior wall stone at center of building, but breaks also occur on inner wall surface.

Walls. Stone small, well cut and dressed, not especially well fitted. More blocklike than usual wall stone. Usual break in construction below medial molding. Walls .85 m thick.

Doorways. Only west doorway remains. Jambs of cornerstone and wall-stone construction with two or three stones in each course. Wide doorway and lintel, probably of wood.

Wall Openings and Projections. Two small square windows below medial molding in east wall of center room, the southern one having been blocked by recent restoration.

Probably projecting rings in wall at each side of west doorway, the holes for the tenons also having recently been filled, but this not certain.

Vaults and Beams. Rather highly specialized small vault stone, well cut and dressed, fairly well fitted. Small size of vault and wall stone may have been due to height to which stone had to be carried. Considerable concave curve to soffit slopes.

In each room were two beams in spring course, three at three-quarter height of vault, four or five in small offset beneath capstones.

Moldings. Simple three-member medial molding. Cornice molding same but heavier with two courses in apron and in top members.

Decoration. Unusual technique of holes picked in wall and molding stones to form designs. This in addition to more conventional decoration. Also shallow holes in vault faces and vault ends (e.g., south end of south room).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

My notes outline the several phases of construction that were visible to me in 1936. As already noted here, subsequent excavation has uncovered major architectural features not seen by me, notably, a buried east stairway, a buried east temple building, and a buried rear room of the Inner West Building. This new and fuller building sequence is set forth by Ruz (Mexico 1956a, pp. 5–13) and by Foncerrada (1965, pp. 153–163). The sequence is essentially what I have outlined above, but with the buried east stairway and buried east temple building accompanying the first phase of the pyramid, and dating from earlier than the Inner West Building.

In 1940 I visited Uxmal briefly and observed the excavation being carried on at the House of the Magician. My diary carries some notes on what I could see of the then newly-discovered Inner East Building and rear room of the Inner West Building. Since, so far as I know, adequate descriptions of those structures have never been published, I include here excerpts of what I wrote at that time:

> The central room [of the Inner East Building] has been cleared of fill, and the facade has been cleared toward the north so as to show two more columns, the suggestion being a north and a south room at either end of the central, cleared chamber [fig. 425]. There is so much plaster on the walls I could not tell if the cross-walls at each end of the central chamber are secondary, but the presence of buried (?) columns at front implies this. The facade seems to possess at least 8 columns (6 now showing) and may be more. [Columns have rectangular capitals.] The cleared chamber has black (?) line paintings on the floor and on the walls. The floor paintings, one being an elaborately twined serpent, are suggestive of game designs found in Mexico on floors. The wall paintings are mainly genre with a high percentage phallic.

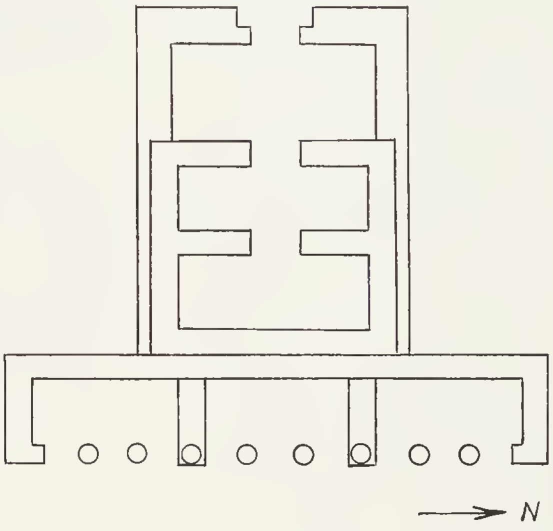


Figure 425. Uxmal, House of the Magician. Hypothetical plan of Inner East Building and Inner and Outer West Buildings.

> As mentioned above, a previously unknown chamber between the east columnar building and the already known west (inner) building. Not enough excavation has gone on to develop the sequence of construction. All that is known is that all this construction is on virtually the same floor level and that the wall between the columnar building and the inner chamber at the west is very thick. The plan [in fig. 425] is a guess. It seems to me that masonry and facade design of the two inner west chambers [i.e., Inner West Building] differ considerably from the columnar building [i.e., Inner East Building] and I should guess them the earlier [but see Mexico 1956a, pp. 5–13, and Foncerrada 1965, pp. 153–163]. In turn, I should guess the columnar building as earlier than the outer building at the west, but none of this sequence is proven, nor is the plan of the east building, as only the northern 6 columns and no end walls are so far showing.
>
> I noted the buried roof comb, which stands over the heavy wall between east and west buildings. It consists of three zones [tiers] separated by [three-member] moldings. There is no coping at present. I should guess a final molding of some sort and maybe a course below this molding had been removed. The lowest zone has simple slot windows, the middle zone has stepped [i.e., stepped on one side, vertical on other] windows, and I think the top zone also had stepped windows reversed from those below [but] this is not certain. The roof comb is of well-cut stone [and] is comparable to those on Casa I [Str. 2C6] and Casa II [Str. 2C2] at Kabah [see pp. 179 and 188].

Ball Court
(Gymnasium)

The badly ruined structures that form the Ball Court lie between the Nunnery Quadrangle and the great platform that supports the House of the Turtles and Governor's Palace (figs. 388, 389). The Ball Court has been excavated and thoroughly described by Alberto Ruz (1958; also see Dates, above).

GROUP 7

I have no notes on this group of buildings in the eastern part of the site (fig. 388). However, Blom (1934, p. 58 and fig. 10) mentions and illustrates a building that appears to be in a fair state of preservation.

What is probably a three-member base molding barely shows in the photograph. The medial molding is of common three-member design, the lowest, apron member built of two courses of stone, the middle member made of colonnettes, and above that the typical small rectangular member. The cornice molding was probably the same plus the usual outward-leaning coping course, but too little is visible in the photograph to be certain. The upper wall zone carries panels of three banded colonnettes, the panels separated by plain wall areas.

The architecture seems to be entirely Puuc in tradition, and the quality of masonry appears to be average to slightly above average.

HOUSE OR PALACE OF THE GOVERNOR
(Palais des Rois)

This magnificent building is thought by many to be the finest example of pre-Columbian architecture in the Americas. It has, of course, been described and illustrated many times. All of the references previously cited (p. 212) for Uxmal deal with the Governor's Palace, and to those may be added: Gann 1918, pp. 140–142; Hissink 1934; Ruz 1955a,b; Spinden 1920. A large amount of excavation and restoration has been carried out here by the Mexican Government, and once more I include my cursory notes on the building, made in 1936 before restoration was undertaken, on the chance that some feature no longer available for study may have been recorded.

Six examples of miscellaneous sculpture are associated with the Governor's Palace. A double-headed jaguar, M21, rests on a small platform on the great terrace before the building, two human heads, M22, 23, were found by Stephens in another small platform on the same terrace, and three stucco heads, M52–54, reputedly come from a sealed chamber beneath the floor of the building (see Miscellaneous Sculpture, below).

There are several altars on the great terrace before the Governor's Palace. I have notes on two of them, Altars 3 and 4 (see Monuments, below).

SUBSTRUCTURE

Construction. Both upper and lower platforms seem to have carried cut stone facing on the terrace walls. Upper platform has deeply tailed in stone with exposed ends faced. Lower platform stone more cubical in proportion. Facing stone of both platforms overlays rough-stone retaining walls. Judging from amount of cut stone in debris, either a great deal has been carted off (to build hacienda?) or final facing was never completed.

SUPERSTRUCTURE

Base Molding. Three-member with groups of four colonnettes in middle member (cf. Nunnery, East and West Ranges, and see figs. 443, 449b,c).

Floor. Dark buff in color. Almost as dark as floors in Nunnery but less red. Usual step up in level to inner chambers.

Stairway. Five or six steps in front of building at center that lead up to low platform, hidden by debris, upon which superstructure rests.

Walls. Very heavy, even front wall about 1 m thick. Finest quality of stone, beautifully cut, dressed, and fitted, both on inner and outer wall surfaces. Outer facing of particularly fine-grade, very white stone that must have been specially selected for this building. Normal construction break beneath medial molding with space left for lintels to be put in place later.

Doorways. Pilaster type (see pp. 232, 254), outer part of jamb built of cornerstones, inner part of full-width jamb stones. Wooden lintels, the outer beam resting at higher level than inner beams. Wall construction shows faced stone across ends of beam rests at both levels.

Wall Openings. Small square or rectangular window in outer wall just below medial molding near each end of each room (i.e., two in each room). Also windows in outer wall at ends of transverse end rooms.

Wall Depressions and Projections. May have been rod sockets and cordholders, but jambs too badly fallen to tell.

Projecting stone ring tenoned into inner wall face just below vault spring at either side of each doorway.

Vaults and Beams. Specialized vault stone of finest type, beautifully cut, dressed, and fitted. Sides of vaults are perfect planes, and ends are almost vertical. Capstones and stones in small offset course beneath capstones are perfectly cut and fitted (cf. Group 22, North Building, p. 218; House of the Pigeons, West Annex, p. 250). Vaults of outer and inner rooms spring from same level.

Beams across inner vaults followed same arrangement as in outer rooms (see Seler 1917, p. 124), except seven in top row. Beam sockets finely fashioned, a semicircle or quarter circle cut in each stone at side of beam (cf. fig. 438b). Some holes appear to have been filled with mortar.

Moldings. Simple three-member medial molding. Cornice molding also of three members with decorative middle member portraying twined serpent (?) and high third member of three courses of stone (only one stone of top course still in place).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Blocking of transverse passage vaults and formation of rooms a secondary operation. In front (east) of south passage are two fallen columns that apparently rested on lowest member of base molding, which formed step up to passage, the two upper members turning into passage. These columns stood in front of secondary doorway but could hardly have carried a lintel (no end rests for lintel) and purpose obscure (but see Ruz 1955a, p. 59, for his findings following excavation).

Subsidiary Building

At eastern edge of great terrace and near southeast corner is long mound with columns in debris. Apparently was building containing single row of rooms facing west, with two rooms at each end whose entrances each had two columns. Center room a question. Moderate amount of debris, and building may or may not have been vaulted. Large fallen spool without tenon and apparently from column (cf. Itzimte, p. 555).

This structure is not to be confused with the house mound reported by Ruppert and Smith (1957, p. 582, Str. 33) which lies adjacent to this building but along the southern edge of the great platform.

House of the Turtles

(Palais de la Reine)

The House of the Turtles lies just north of the Governor's Palace, at the northwest corner of the great terrace that supports both structures (figs. 388, 389). Although not comparable in size and importance to the Nunnery Quadrangle, the House of the Magician, or the Governor's Palace, it is a beautiful building, rather well preserved, and has caught the attention of most visitors to the site. Most of the general references cited for Uxmal (see p. 212) illustrate or give some mention to the House of the Turtles. In recent years the structure has undergone considerable excavation and restoration (see Sáenz 1969, p. 5; G. Andrews 1975, figs. 208, 213). Once more I include my cursory notes on the chance they include something of value.

SUPERSTRUCTURE

Base Molding. Simple course of dressed stone resting on a low plinth course. Might be thought of as two-member molding, but questionable.

Floor. Very dark brown, about chocolate color. Step up in level to inner rooms.

Walls. Moderate thickness (.70 m). Same fine masonry as in Governor's Palace (see above). Stone of outer wall facing may have been selected for quality and color, a cream or light buff. Construction break at normal level below medial molding.

Doorways. Normal Puuc jamb construction. Wooden lintels. Faced stone across ends of lintel rests, as in Governor's Palace.

Wall Openings. Small square windows just below medial molding. Two on each side and one at each end of each room (i.e., six in each room), except no windows in end walls of central longitudinal chamber.

Wall Depressions and Projections. Seem to have been rod sockets in doorjambs. Stone rings as in Governor's Palace (see above).

Benches. One across south end of eastern inner room. L-shaped bench across west end and part of north wall of southern longitudinal room. Bench face made of single course of stone that may have carried a molding above.

Vaults and Beams. Vaults show same beautiful stone work, straight sides, fine capstones, etc., as in Governor's Palace. All vaults spring from same height and at usual level.

Four beams in course below spring of vault in each room. Four beams in course below offset beneath capstones in each outer transverse room, six in each inner transverse room, eight in each longitudinal room. Stones forming beam sockets cut the same as in Governor's Palace.

Moldings. Simple three-member medial and cornice moldings with turtles tenoned into middle member of cornice molding. Lowest member of cornice molding made of two courses of stone, and, judging from height of roof surface, top member was almost surely of two courses although only one row remains in place.

See Phallic Temple (p. 262) for waterspouts on House of the Turtles.

Buildings 1 and 2 at the West of the Governor's Palace

These two buildings, located south of the House of the Turtles and west of the Governor's Palace, are partly buried by the great terrace that supports the two larger structures. They seem almost surely to be of an earlier period than the House of the Turtles and the Governor's Palace, and are in fact of the Chenes style (see Group 23 above), a different style of architecture from the Puuc remains that characterize the site. Buildings 1 and 2 at the West of the Governor's Palace have been described elsewhere (see Pollock 1970, pp. 66–78).

Great Pyramid or Great South Pyramid

(Nameless Mound or Hill, Pyramide Sacrée du Palais des Rois, Mound of Sacrifice)

This great structure, the largest pyramid at Uxmal, lies immediately southwest of the Governor's Palace and east of the House of the Pigeons Complex (figs. 388, 389). The sides strewn with loose rock and covered with rank vegetation, the pyramid has presented in modern times a somewhat amorphous appearance: only the tumbled remains of some vaults show at the base of the mound and a few decorative details are visible near the summit. It is presumably for this reason that so imposing a mass has received relatively little attention from writers on Uxmal, an exception being Seler (1917, pp. 27–32), who discussed the decoration visible in his day (also see Hissink 1934, pp. 26–27). My feeling in 1936 was that little could be learned here without far more excavation than I was able to undertake, and I have a mere handful of superficial observations on the structure.

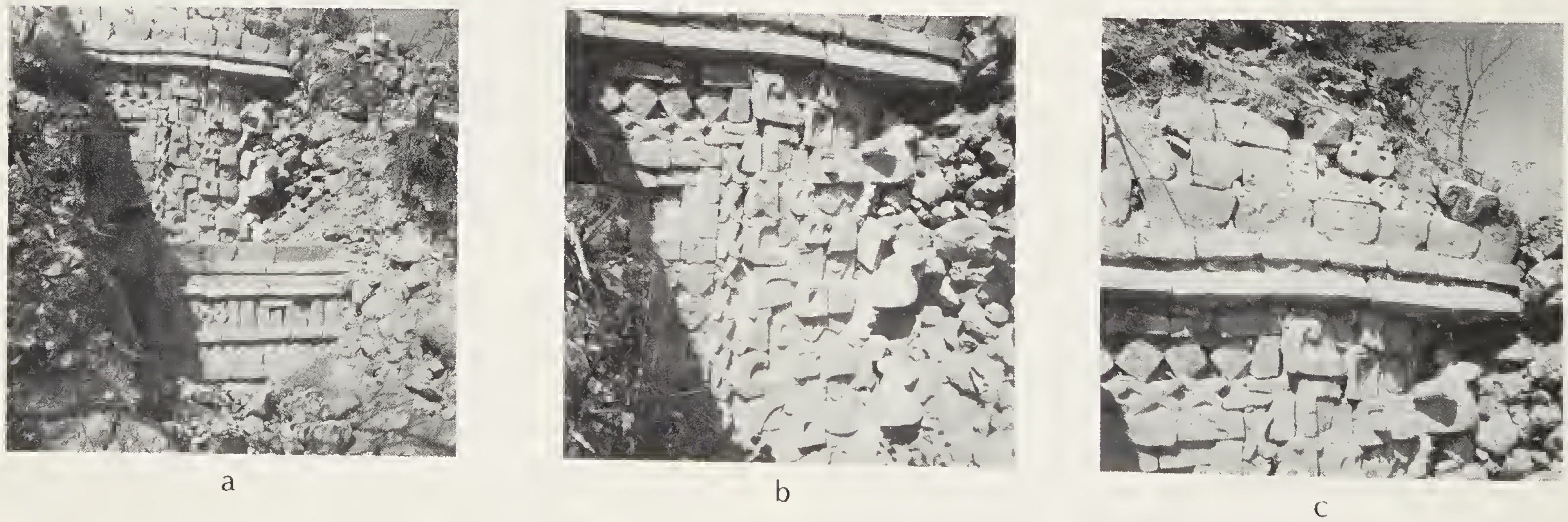
In the autumn of 1941 the late S. G. Morley carried out limited excavations at the Great Pyramid, or the Great South Pyramid as he called it at that time. This work, the results of which are described in a brief article by Morley (1942; and see 1956, pl. 51a, c, d), allowed him to produce the plan and section given here. Beside this drawing there are in the old files of Carnegie Institution of Washington, now the property of Peabody Museum of Harvard University, copies of Morley's diaries which contain an account of the excavations, and measurements for the plan and section and for elevations that seem never to have been made. Unfortunately, the photographic record is woefully meager and quite inadequate for the reconstruction of the masks and geometric decoration that graced the upper terraces of the pyramid.

PLAN AND SECTION

See figure 426. Plan and section by S. G. Morley.

REMARKS

The plan, section, and other illustrations (figs. 427–430) given here should be used with the Morley (1942) description of the pyramid. I include most of the photographs in the files, omitting only those views that duplicate Seler's (1917, figs. 9–15, pls. 2, 3) and Morley's (1956, pl. 51) published illustrations and several other views that provide little added information. Although the value of illustrating single stones, unrelated to the wider decorative scheme, may be questioned, there is so little known of this building that it has seemed wise to include those photographs. Two drawings, also with the Morley materials, are reproduced here (fig. 429).


a

b

c

Figure 427. Uxmal, Great Pyramid. Decorated terrace near summit: a, northeast corner, looking west, and showing basal platform (cf. fig. 429a), lower wall zone with corner masks, and medial molding; b, detail of masks seen in a; c, same view showing medial molding and fragmentary remains of corner mask on upper facade.

WEST GROUP OR QUADRANGLE

The only notes I have on this large but badly fallen quadrangle, located west of the House of the Pigeons (figs. 388, 389), call attention to a vaulted entrance passageway leading into the courtyard, an observation confirmed by Blom (1934, p. 59) and by Seler (1917, p. 153). Seler gives a fragmentary plan (ibid., fig. 132) of the eastern building of the quadrangle, showing the vaulted passage, and describes and illustrates (ibid., fig. 133) the moldings and upper-facade decoration of that structure. The moldings shown are of the simple three-member variety, with apron and reverse-apron bottom and top members, while the upper facade carries groups of four banded columns separated by plain areas.

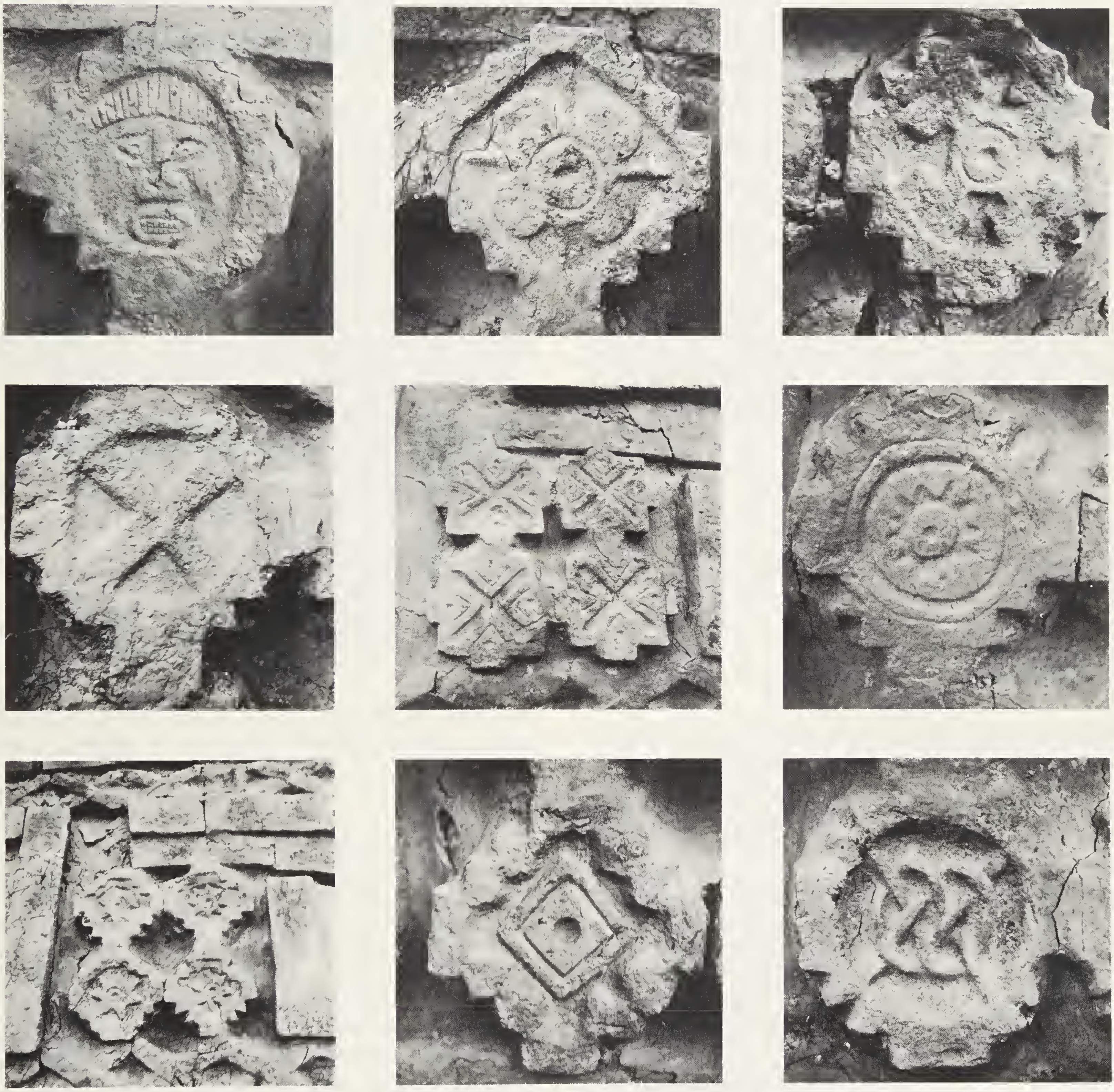


Figure 428. Uxmal, Great Pyramid. Decorated terrace near summit. Examples of carved stones on facade. Note similar stones in figure 427a, b (left of middle mask) and in Morley 1956, plate 51a.

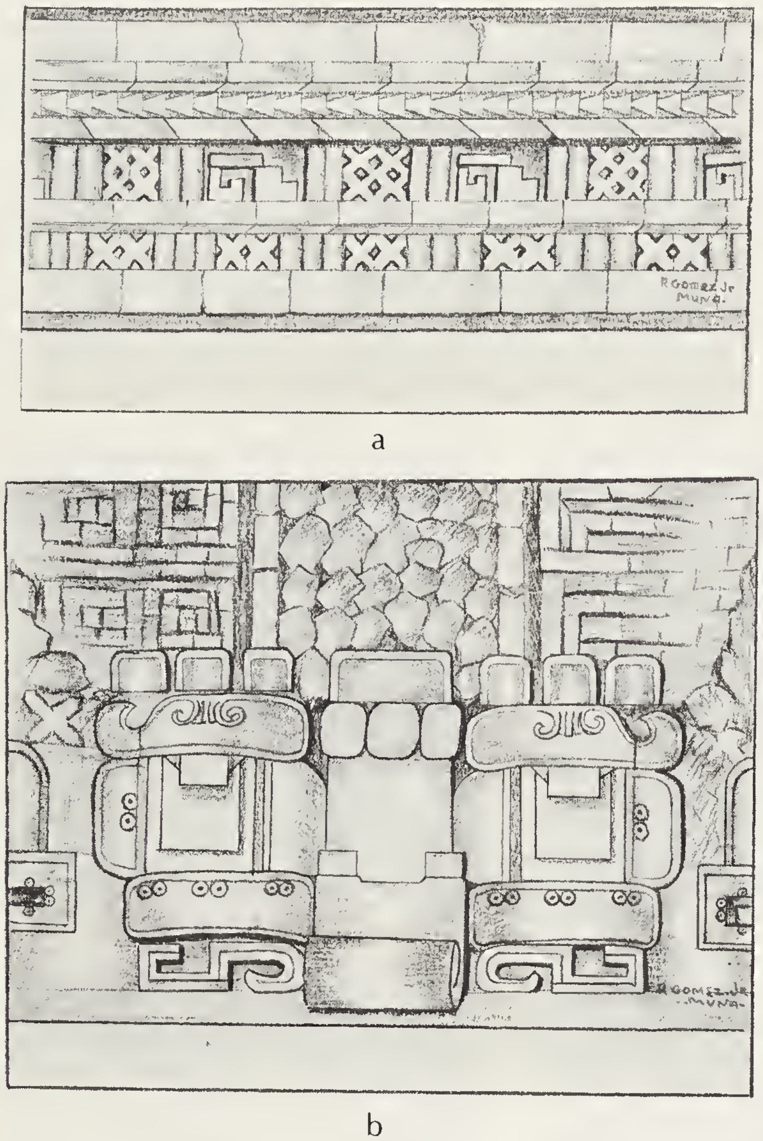


Figure 429. Uxmal, Great Pyramid. Decorated terrace near summit: a, drawing of decoration on basal terrace, by R. Gomez (cf. fig. 427a); b, drawing of mask that served as step to inner chamber at north (cf. Morley 1956, pl. 51c).

SOUTH OR PIGEONS GROUP

This immense assemblage of courts and surrounding buildings lies at the southern end of the main axis of the central section of the city, and looks north to the North Group (fig. 389). The principal approach seems quite surely to have been from the north. The group has been mapped and described in detail by Morley (1910). It has also been studied by Seler (1917, pp. 19–27) and by Proskouriakoff (1946, pl. 20) in order to make her reconstruction drawing.

Most of the buildings in this great complex are in extraordinarily poor state of preservation. My notes deal with those structures or parts of structures that seemed to present some meaningful architectural evidence, but the record is at best fragmentary.

There are several sculptures, M24–26, from this group (see Miscellaneous Sculpture, below) and three monuments, Altars 5, 6, and 7, one in the North Quadrangle, one in the South Quadrangle, and one in the courtyard before the South Temple (see Morley 1910, pp. 3, 10–11, 16; and see Monuments, below).

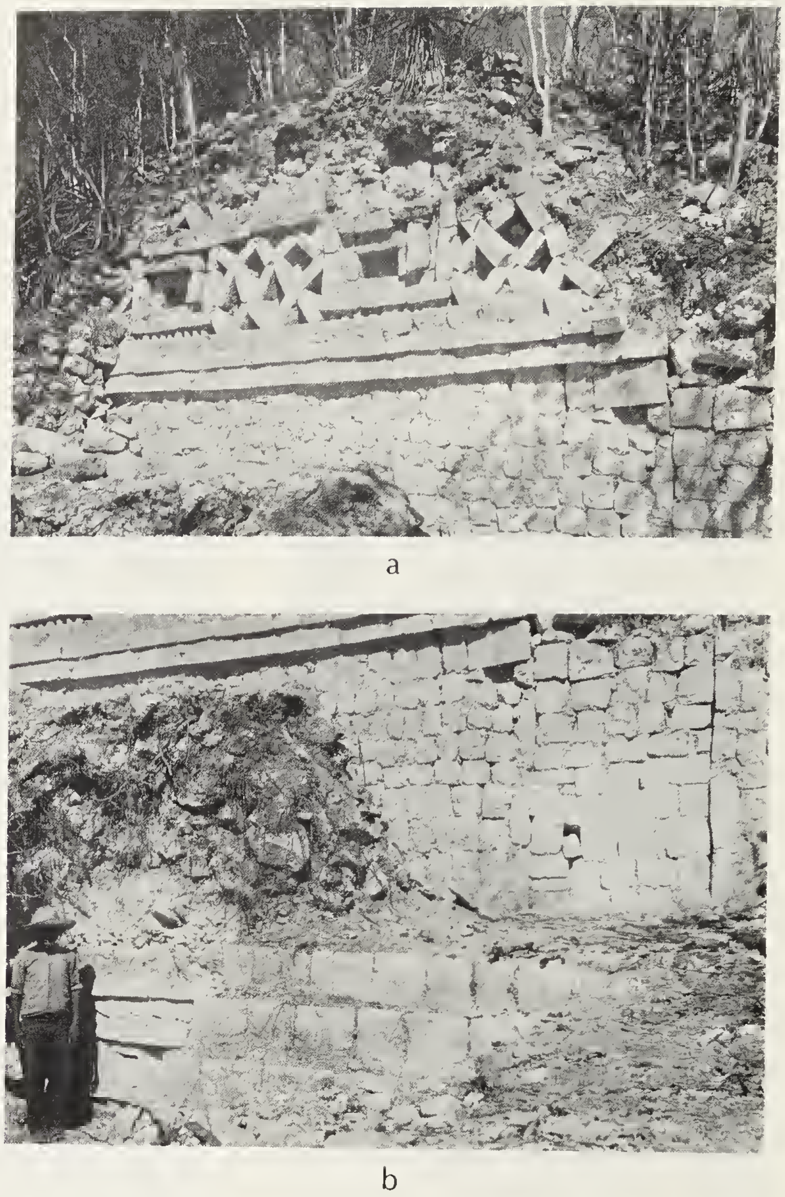


Figure 430. Uxmal, Great Pyramid. Decorated terrace near summit: a, south side, looking north, and showing decoration on upper facade; note blocked doorway (lower right) seen in b; b, south side, looking north and showing basal platform with small, centrally located stairway, and blocked doorway to filled chamber.

South Quadrangle

HOUSE OF THE PIGEONS OR DOVES

Although the entire South Group has sometimes been referred to as the House of the Pigeons, that name applies, properly speaking, only to the building on the north side of the South Quadrangle, labeled M on the Morley (1910, pl. 1) plan. This structure carries the relatively well-preserved perforated and serrated roof comb that gives the name to the building (fig. 431). In recent years it has undergone extensive excavation and restoration (see Sáenz 1968; G. F. Andrews 1975, figs. 217, 218, 223).

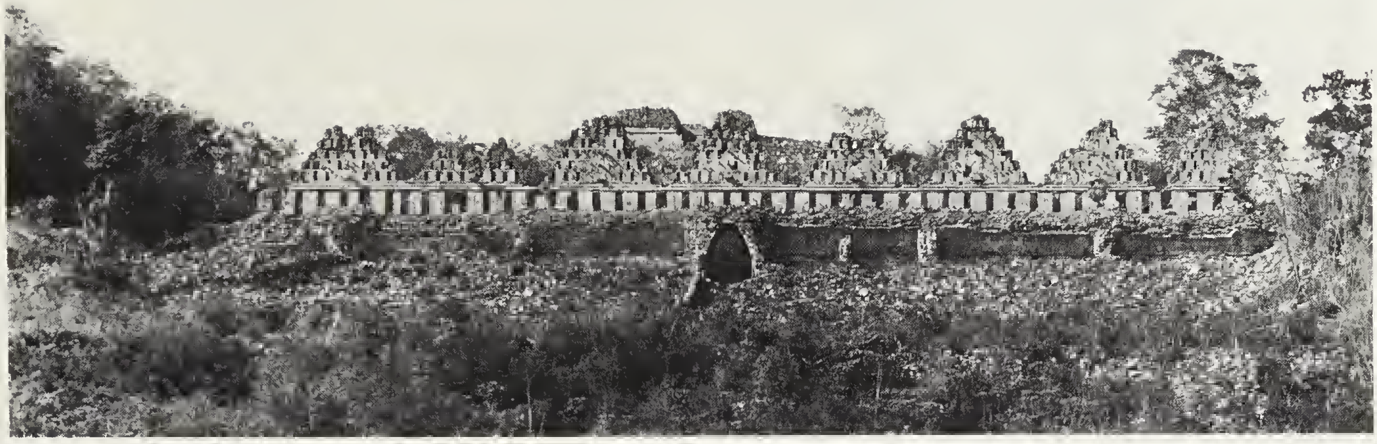


Figure 431. Uxmal, South Group, South Quadrangle. House of the Pigeons, looking south, with South Temple in background.

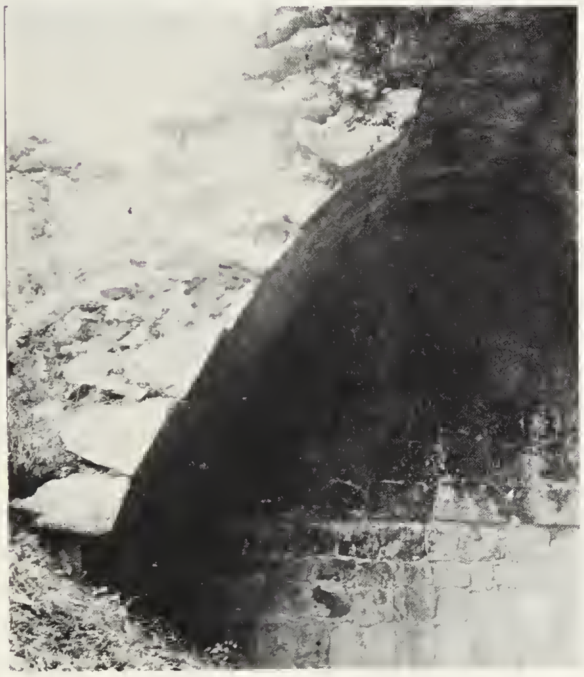


Figure 432. Uxmal, South Group, South Quadrangle, House of the Pigeons. View of west end of southwest room, looking west, and showing south side of vault in section.

SUPERSTRUCTURE

Walls. Outer facing seen only in passageway. Well dressed and fairly well fitted. Inner wall facing of average quality but rather poorly fitted (fig. 432).

No measure of outer walls possible. Medial wall 1.45 m thick near top and probably about 1.30 m at bottom.

Vaults. Stone about like that in South Temple (see below) but not quite so well shaped and finished (fig. 432). Capstones not so well dressed or fitted. Large curve to vault face.

Roof Structure. Roof comb rests over medial wall of rooms below (see Morley 1910, pl. 1b). Remarkable that so much remains standing (fig. 433a), particularly since structure is essentially unstable, being thicker at the top than at the base (fig. 433b). Originally were 9 sections (see Proskouriakoff 1946, pl. 20), of which the easternmost is now gone and the westernmost is half fallen.

Horizontal measurements vary greatly. Sections about 6.60 m wide except center section which is 7.35 m. Space of 1.0–1.10 m between sections. Lower windows (i.e., below molding) .40–.60 m wide, .42 m and .48 m frequent measures. Windows immediately above molding .20–.30 m wide, frequently .26–.27 m.

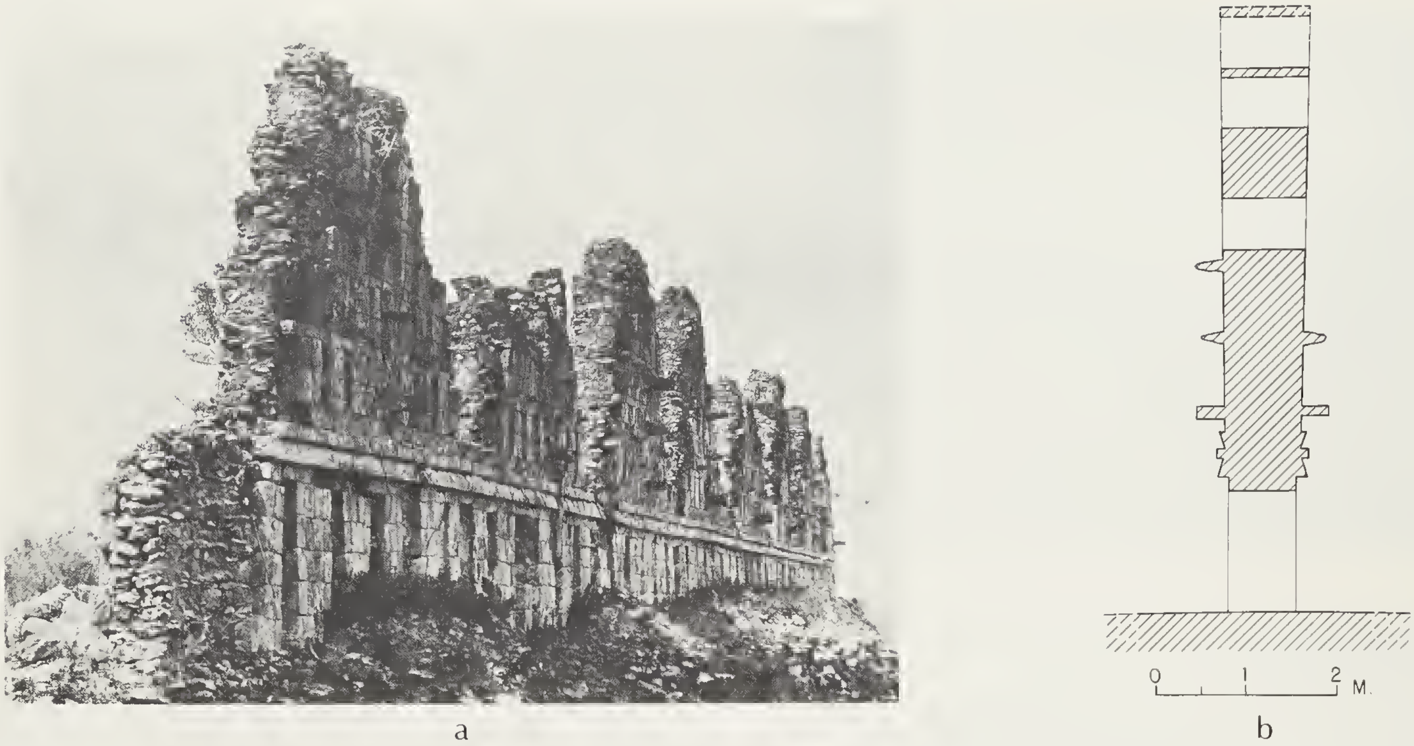
Six steps or tiers of windows above molding now standing and definite indication of a seventh (fig. 434). Could have been an eighth. Many windows blocked to allow surface decoration of roof comb, but basic scheme seems to have been as follows:

Center section: 1st row 10 windows, 2nd row 8, 3rd row 6, 4th row 5, 5th row 4, 6th row 3, 7th row (?). Other sections: 1st row 8 windows, 2nd row 8 (closer together), 3rd row 6, 4th row 6 and 5, 5th row 5 and 4, 6th row 3, 7th row (?).

Roof comb faced at front and rear with dressed stone, but east and west edges of sections and sides of windows apparently did not carry cut-stone facing (fig. 433a). Numerous tenons of well-cut and dressed stone project from both north and south faces of roof comb. Undoubtedly to support sculpture in either stone or stucco. Also many crude stone pegs to hold stucco decoration. Number of traces of stucco modeling remain (fig. 434), mostly low-relief feathers or plumes that may have been part of some headdress.

WEST RANGE

This is the building designated T on the Morley (1910, pl. 1) plan. As Morley noted (ibid., p. 11), the structure is approached from the court of the South Quadrangle by a wide staircase.



a

b

Figure 433. Uxmal, South Group, South Quadrangle, House of the Pigeons: a, front (north face) of roof comb, looking west; b, section of roof comb.

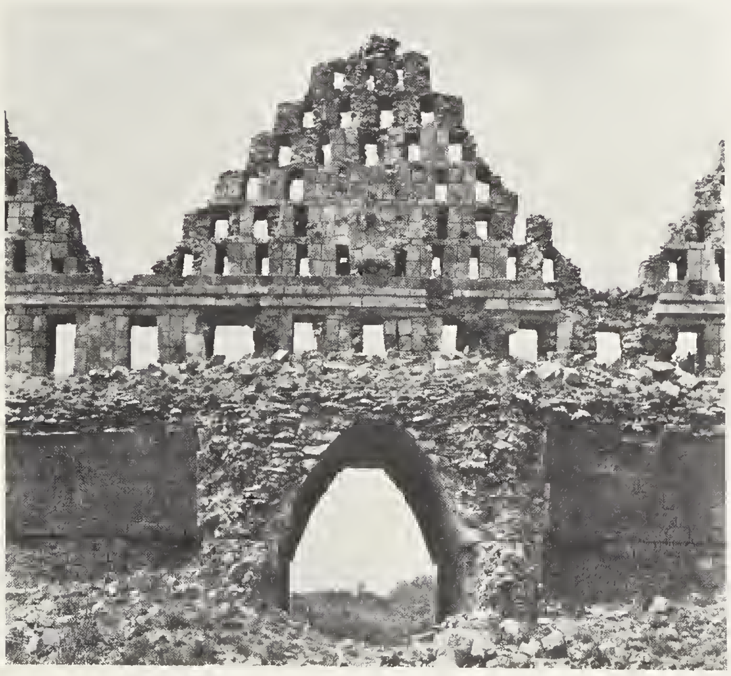


Figure 434. Uxmal, South Group, South Quadrangle, House of the Pigeons. Central part of building, looking north, and showing portal vault and fragments of stucco decoration on roof comb.

SUPERSTRUCTURE

Section. See figure 435a.

Walls. Outer walls .85–.90 m thick. Outer wall facing of well-dressed, fairly well-fitted stone (fig. 435c); inner facing poorly dressed, poorly fitted. Average Puuc in quality.

Vaults. Little specialization of stone (fig. 435b). Not much curve of soffit slope (fig. 435a). Small offset beneath capstones roughly made and not at all pronounced.

Moldings. Three-member medial molding with colonnettes in middle member (fig. 435a,c; and see Morley 1910, fig. 1; Seler 1917, fig. 8d). Cornice molding apparently same as medial, but presumably with usual outward-leaning top member of which none remains in place.

Roof Structure. See Morley 1910 (p. 12). My notes carry no mention of a roof comb.

Decoration. Lower wall zone at front (east) appears to have carried split columns (but see Morley ibid., and Seler 1917, p. 24). Diameter of columns .23 m, space between columns .03–.06 m. No sign of spools so columns probably plain.

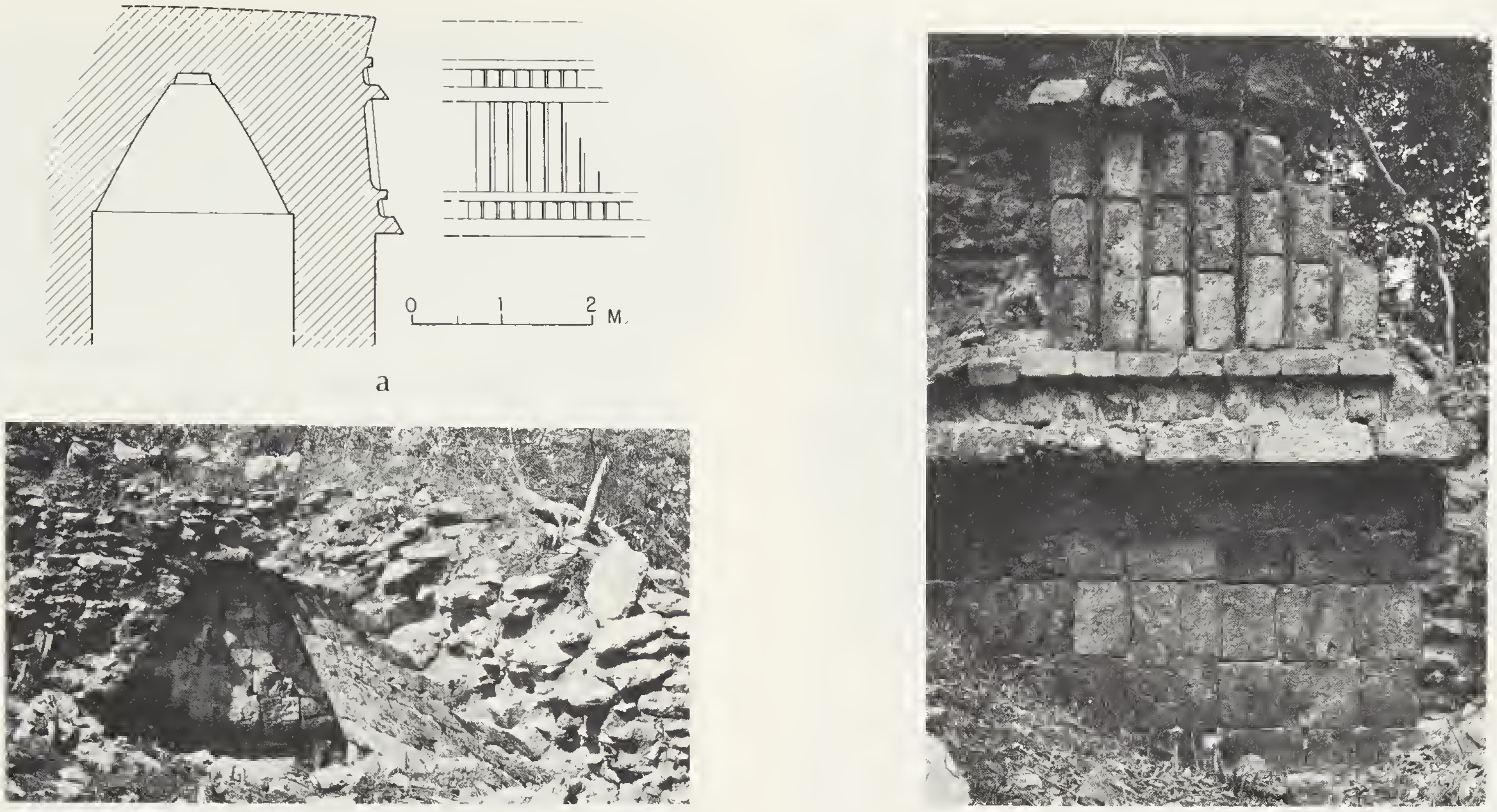
Upper wall zone of split columns (fig. 435a, c; and see Morley 1910, fig. 1; Seler 1917, fig. 8d), but one or two fallen elements at southeast corner of building suggest corners may have carried masks.

Moldings and upper facade apparently painted solid red.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Ruined building adjoining West Range at south is secondary to West Range and may be, but not certainly, contemporaneous with South Range (see Morley 1910, pl. 1V, W). Ruined building had simple three-member moldings and plain upper wall zone like South Range (see below).

Building to north of West Range seems secondary to House of the Pigeons and probably, but not certainly, to

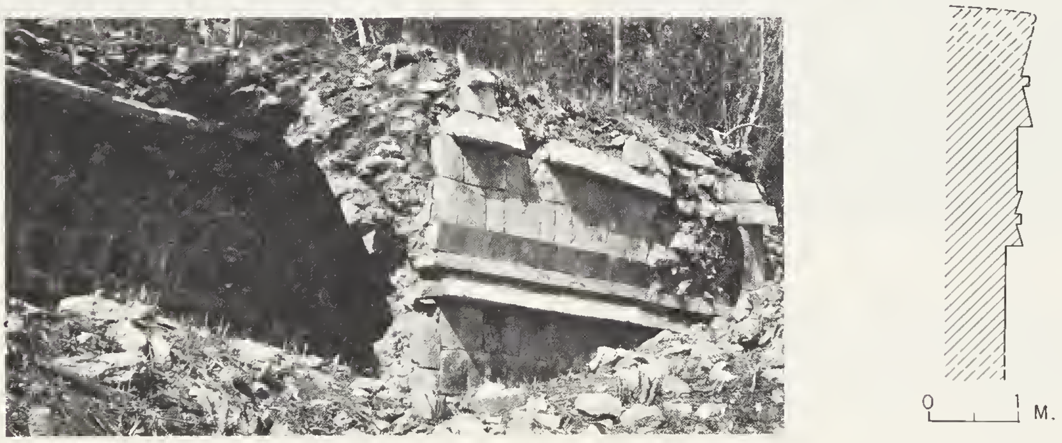


a

b

c

Figure 435. Uxmal, South Group, South Quadrangle, West Range: a, section of one of western rooms, and restored elevation of upper zone of west facade; b, remains of vault; c, fragment of west facade, looking east.



a

b

Figure 436. Uxmal, South Group, South Quadrangle, South Range: a, remains of vault and fragment of facade just east of center room, looking southwest; b, section of upper facade.

West Range (see Morley 1910, pp. 8–9, and Seler 1917, fig. 7B, and pp. 22–24). Building has simple three-member medial molding, plain upper facade, and masonry like that of West Annex (see below).

SOUTH RANGE

This badly fallen building is labeled V on the Morley (1910, pl. 1) plan.

SUPERSTRUCTURE

Walls. Front wall .65–.70 m thick, medial wall .95 m. Outer facing stone well dressed (fig. 436a), inner facing poorly dressed and fitted. Average Puuc in quality.

Doorways. Jambs in medial wall built of two vertical courses of cornerstones (cf. Cemetery Group, Western Building, fig. 405a). Secondary construction employs stone lintels. No primary lintels visible.

Wall Projections. Cordholders of ring variety.

Bench. One example noted at west end of room east of central transverse vault.

Vaults. Similar to those in South Temple (see below), but vault stone not quite so well fitted or so specialized (fig. 436a). Considerable curve to soffit slopes.

Moldings. Simple three-member moldings (fig. 436). Coping course nowhere standing but assumed to form usual outward leaning member.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Two rear (south) rooms at each side of central transverse vault filled with masonry, and doorways in medial wall blocked. Lintels removed when doorways were blocked and replaced by ordinary wall masonry, or, alternatively, lintels never put in place and doorways blocked prior to erection of vaults. Problem of how lintels could be removed with vaults resting on them, and second alternative seems more likely.

Central transverse vault seemingly once intended as passageway. Secondary wall across rear and across front, with small doorway in front wall, thus making room of old passageway (see Morley 1910, pp. 13–15; Seler 1917, pp. 25–26).

WEST ANNEX

This building, which is designated X on the Morley (1910, pl. 1) plan, stands separate from, and behind, the West Range of the South Quadrangle. Stone cutting and construction in general are of the highest quality, comparable to that employed in the House of the Governor and the House of the Turtles (see above).

Sculpture M26 was found inside the West Annex (see Miscellaneous Sculpture, below).

SUPERSTRUCTURE

Plan. See figure 437a.

Section. See figure 437b.

Base Molding. Single course of plain but finely dressed and fitted stone (fig. 437b).

Floor. Normal, with rise of level in rear room.

Walls. Very light. Longitudinal walls .46 m thick, end walls .51 m. Both outer and inner wall facing of stone of best quality, finely dressed and fitted (fig. 438). Usual construction break at level beneath medial molding.

Doorways. Wooden lintels; probably two beams over each doorway, but not certain. Full-width jamb stones but small stones. Jambs apparently vertical.

Wall Openings. Small windows about .10 m square just below level of medial molding at each end of each room (figs. 437b, 438b), and in front wall about .50 m from each end of room. Window carefully cut in wall stone.

Wall Depressions and Projections. Rod sockets in form of hemispheroid depressions in front jambs.

Fragments of rings projecting from wall just below spring of vault of inner room at each side of doorway (fig. 437b). Rings probably once occurred in same position inside outer doorway, as well as slightly above floor. A stone peg set in mortar in beam hole just below offset course below capstones in front room.

Vaults and Beams. Stone finely cut, dressed, and fitted (fig. 438b). Wide span by capstones. High percentage of specialized vault stones, .25–.30 m in height (fig. 437c).

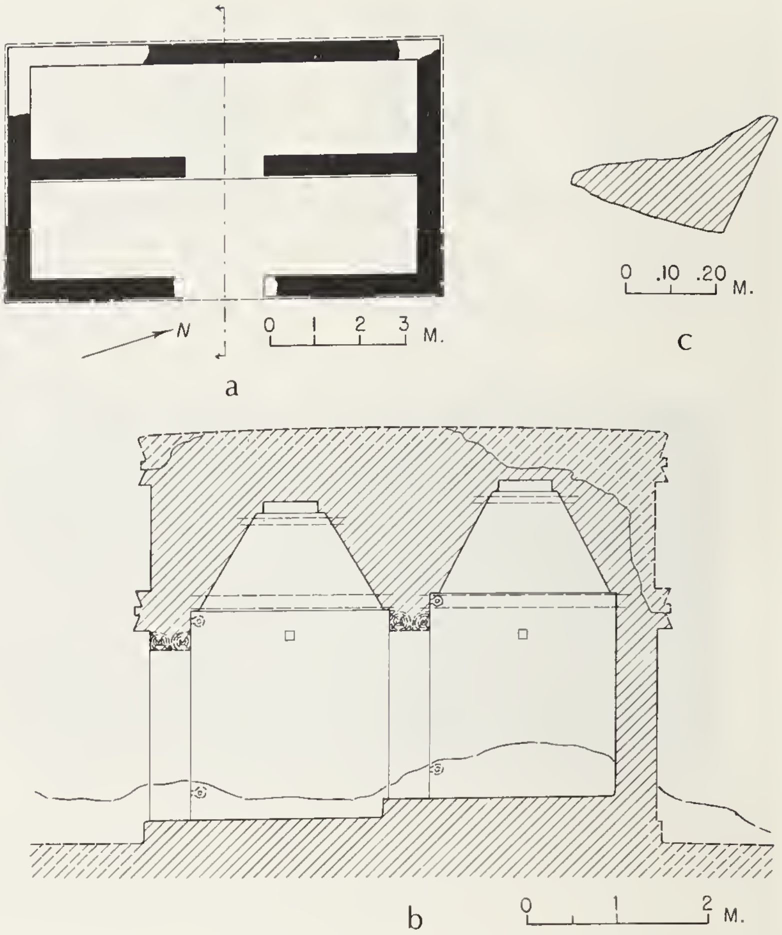


Figure 437. Uxmal, South Group, South Quadrangle, West Annex: a, plan; b, east-west section; c, section of typical vault stone.

Pair of beam holes near each end of each room in spring course in front room (fig. 438b), just below spring in rear room. Six smaller holes just below offset course, beneath capstones (see Seler 1917, fig. 8b).

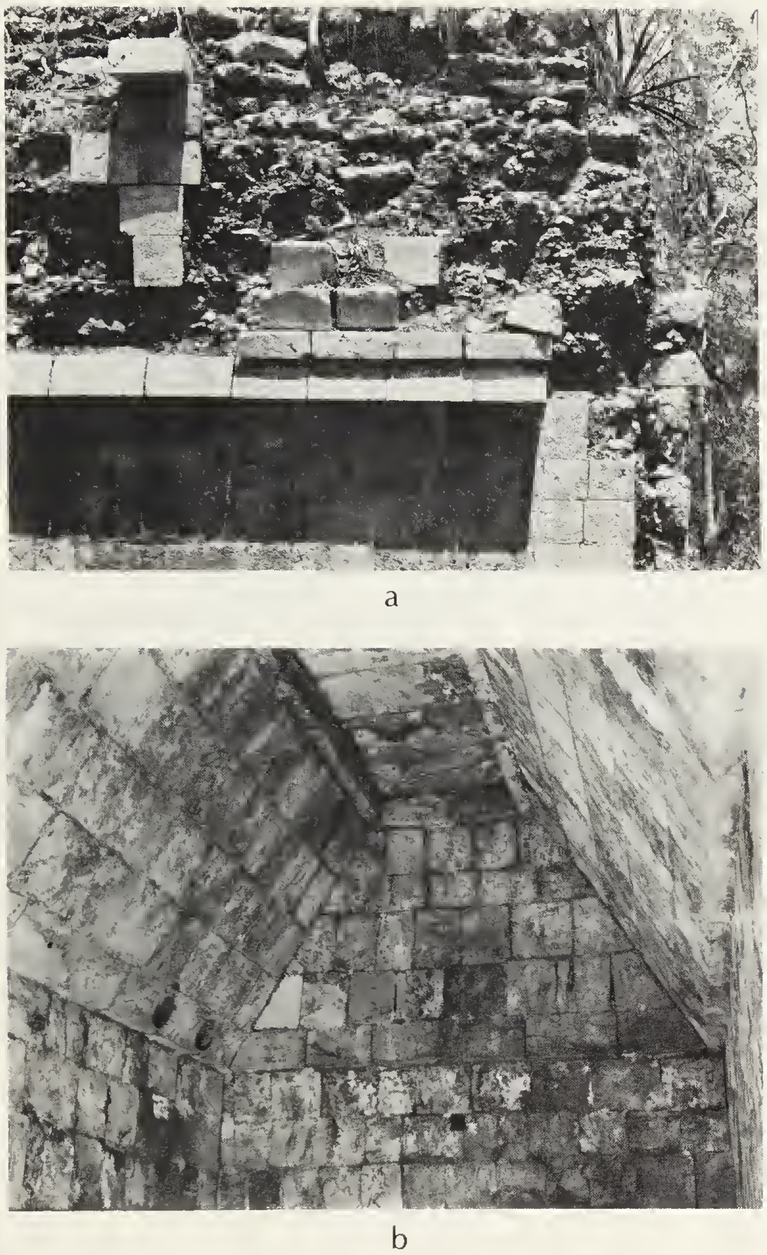
Moldings. Simple three-member medial molding (figs. 437b, 438a) and cornice molding presumably the same, but height of coping course a question.

South or Southwest Temple

(Mausolée des Prêtres)

This is the great pyramid temple at the southern end of the South Group (fig. 389). It will be noted that Morley (1910, pl. 1Z, G′) indicates, on his early plan of the group, a series of rooms at two levels across the western side of the pyramid, whereas on his map (fig. 389) he shows rooms on the south and east sides as well. In this connection I quote from his 1942 diary, a copy of which is in Peabody Museum of Harvard University:

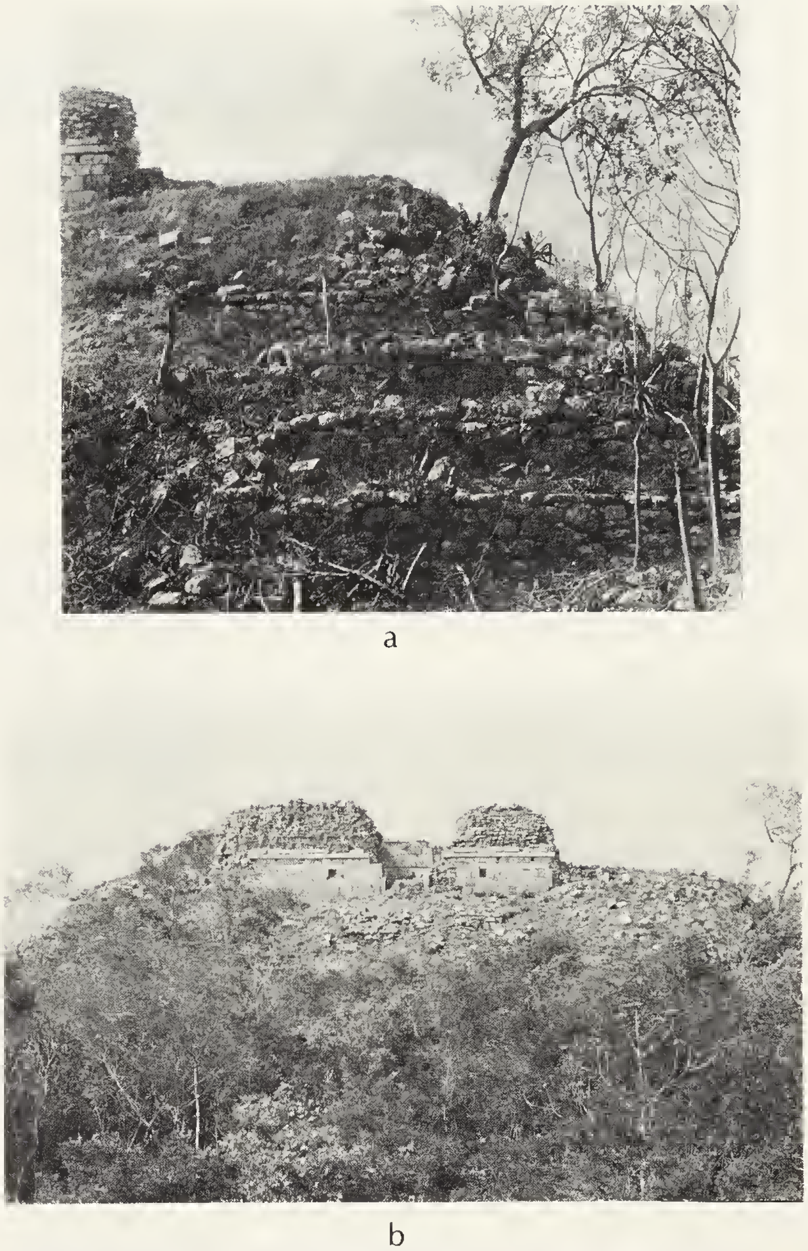
> We crossed west in front of the South Temple at the level of the court just north of the South Temple and then skirted south along the west side of the South Temple. Here the two ranges of rooms, one behind and above the other, show, as in my map of the South Group, along the west side of the South Pyramid. But here came the second discovery of the morning. This double



a

b

Figure 438. Uxmal, South Group, South Quadrangle, West Annex: a, fragment of east facade at northeast corner, looking west, and showing medial molding and first course of cornice molding; b, south end of front room, looking south.



a

b

Figure 439. Uxmal, South Group, South Temple: a, terraces of pyramid at northwest corner, looking south; b, front (north) of overgrown pyramid and temple building at summit.

range of rooms, one higher than the other, continued clear across the south face of the South Pyramid and then turning northward at the southeast corner continued clear across the east face of the South Pyramid to where it joined the southwest corner of the Great Pyramid.

The diary includes a sketch section of two ranges, one above the other, the front wall of the upper range resting over the rear wall of the lower, and the roof of the lower range forming a terrace in front of the upper rooms. Both ranges are shown with simple three-member moldings, possibly a convention, and the upper range has a three-member base molding of conventional design.

My notes deal only with the temple building at the top of the pyramid (fig. 439b), but I am including a photograph of the terraces of the pyramid (fig. 439a).

SUPERSTRUCTURE

Plan. See figure 440a.

Section. See figure 440b.

Base Molding. Simple course of dressed stone (fig. 440b).

Floor. Normal. Rise in level in rear room.

Walls. Front wall .66 m thick, rear walls .73 m, no measure for end walls. East interior transverse wall .70 m thick. Medial wall .54 m thick and unusual in being lighter than other walls.

All stone well faced. Outer facing stone much better fitted than inner. Inner facing stone heterogeneous in size and shape, some very large stones (up to 1.10 by .70 m). On the whole, second-rate work. Construction break at usual level below medial molding.

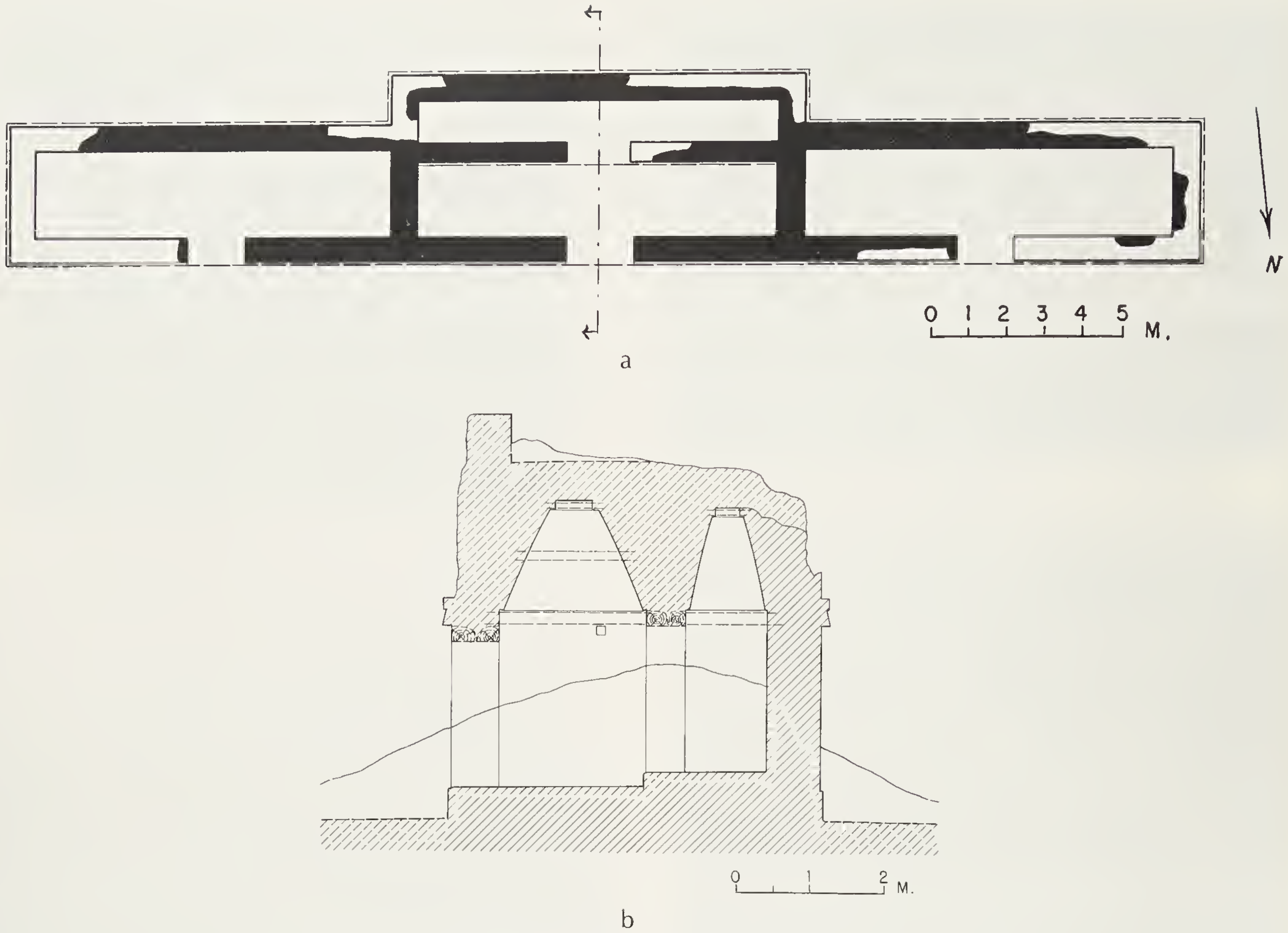


Figure 440. Uxmal, South Group, South Temple: a, plan; b, north-south section.

Doorways. Normal large jamb stones. No trace of any lintel. Probably of wood.

Wall Openings. Small windows, about .12 m square, in front wall near each end of each front room and in transverse walls between rooms. All at level just beneath medial molding.

Wall Depressions. None preserved and visible.

Vaults and Beams. Very slight curve to soffit slopes (fig. 441a). High proportion of specialized vault stone (fig. 441b). Well faced and fairly well fitted. Capstones well fitted.

Holes indicate four beams in each room in course below spring of vault, five beams at half height of vault, two to six beams in offset course beneath capstones (fig. 440b).

Moldings. Only one stone in place above second member of medial molding. Appears to be wall stone, so molding probably two-member variety (fig. 440b). No indication of style of cornice molding.

Roof Structure. Flying facade now standing .65 m high and .60 m thick, the front facing having fallen (fig. 440b). Probably originally .75–.80 m thick. Windows in flying facade at roof level and now open at top. Original height a question, but not much debris on roof, and facade probably never very high. Windows .25–.30 m wide.

Flying facade faced with dressed stone. Now stands three courses at highest point. Good chance facade was finished at top with string course, possibly overhanging, .19 m high.

GROUP OF THE HOUSE OF THE OLD WOMAN

A short distance southeast of the great platform of the Governor's Palace is a badly preserved group of structures dominated by a large pyramid at the southeast corner of the group (figs. 388, 389). This pyramid and its attendant buildings are known as the House of the Old Woman, a name, according to Stephens (1843, 1:320), derived from "a mutilated statue of an old woman lying before it" (see Miscellaneous Sculpture M27, below). The pyramid carries an almost totally ruined building at the summit and a somewhat better preserved temple lower down, at the northwest corner (fig. 442). There is a difference of opinion among writers as to which building is the House of the Old Woman. Stephens (ibid.), who first published the name, clearly thinks it is the lower temple. The question seems to me trivial. Here I treat the pyramid and both temple buildings as the House of the Old Woman.

Besides the sculpture of the "old woman," M27, another carved piece, M28, lies nearby (see Miscellaneous Sculpture, below).

House of the Old Woman

SUBSTRUCTURE

Construction. Pyramid faces west with low terrace across front, and still lower platform projecting further forward and forming approach to main stairway. Side of staircase built of faced veneer stone. Pyramid terraces faced with deeply tenoned stones, well cut and dressed on exposed ends. Rounded corners of terraces built of great stones, cut so that outer face of each stone forms arc of 60° or 70°.

UPPER TEMPLE

Building rests toward rear of pyramid top so that there is terrace in front (west) of it. Step up in level prior to reaching building.

SUPERSTRUCTURE

Construction. Building was two rooms wide and two or three rooms long. Base molding of three members (fig. 443), the center member employing groups of four colonnettes separated by plain areas. Wherever visible, masonry and stone cutting of finest type.

Seemingly only outer walls and north half of medial wall completed. Large pile of debris at north end indicates fallen vaults. Almost no debris at south end of building.

Fine masonry of same type as that of Unfinished Building (see below) and of Structure 2C7 at Kabah (see p. 198), also uncompleted.

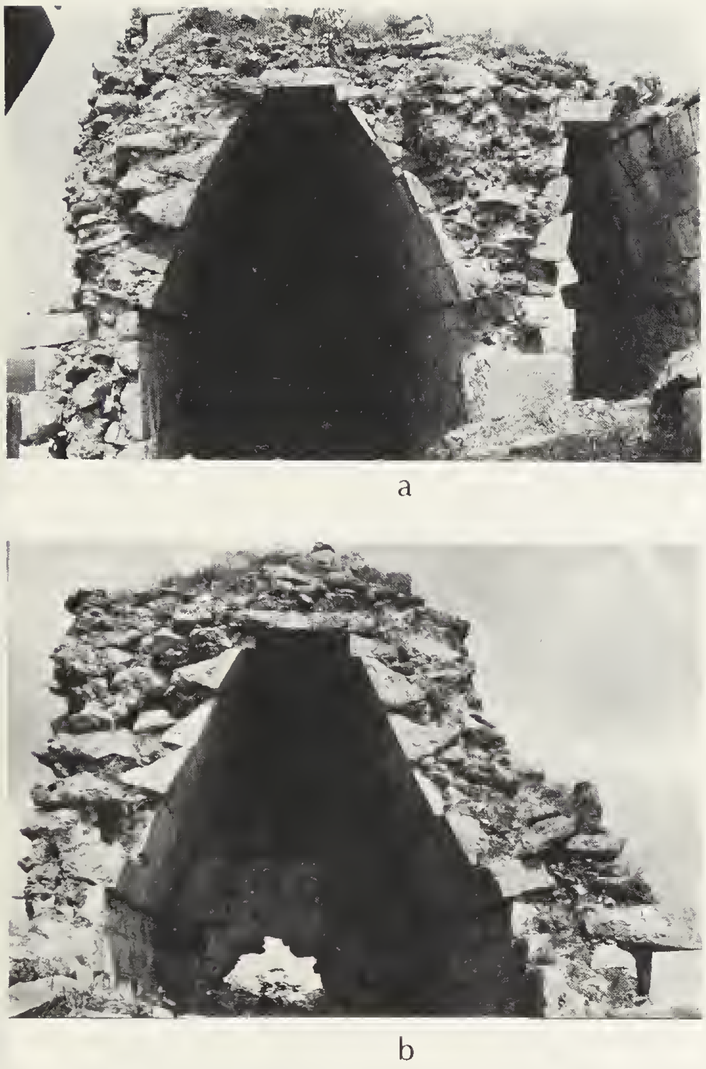


Figure 441. Uxmal, South Group, South Temple: a, eastern part of central front and rear rooms, looking east; b, west end of central front room, looking west.

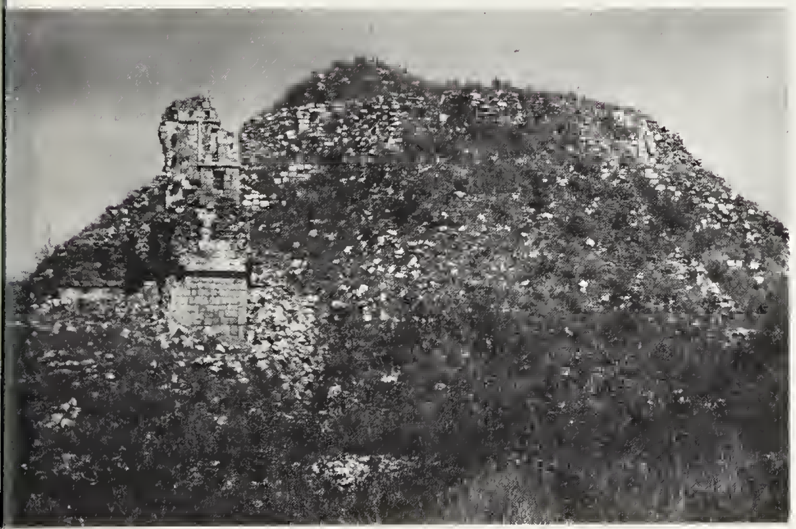


Figure 442. Uxmal, House of the Old Woman. Front of structure, looking east, and showing Lower Temple, pyramid with remains of stairway on west side, and mound on summit that is the debris of Upper Temple.

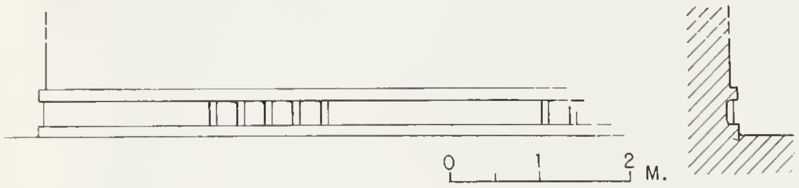


Figure 443. Uxmal, House of the Old Woman, Upper Temple. Elevation of base molding on rear of building at southeast corner.

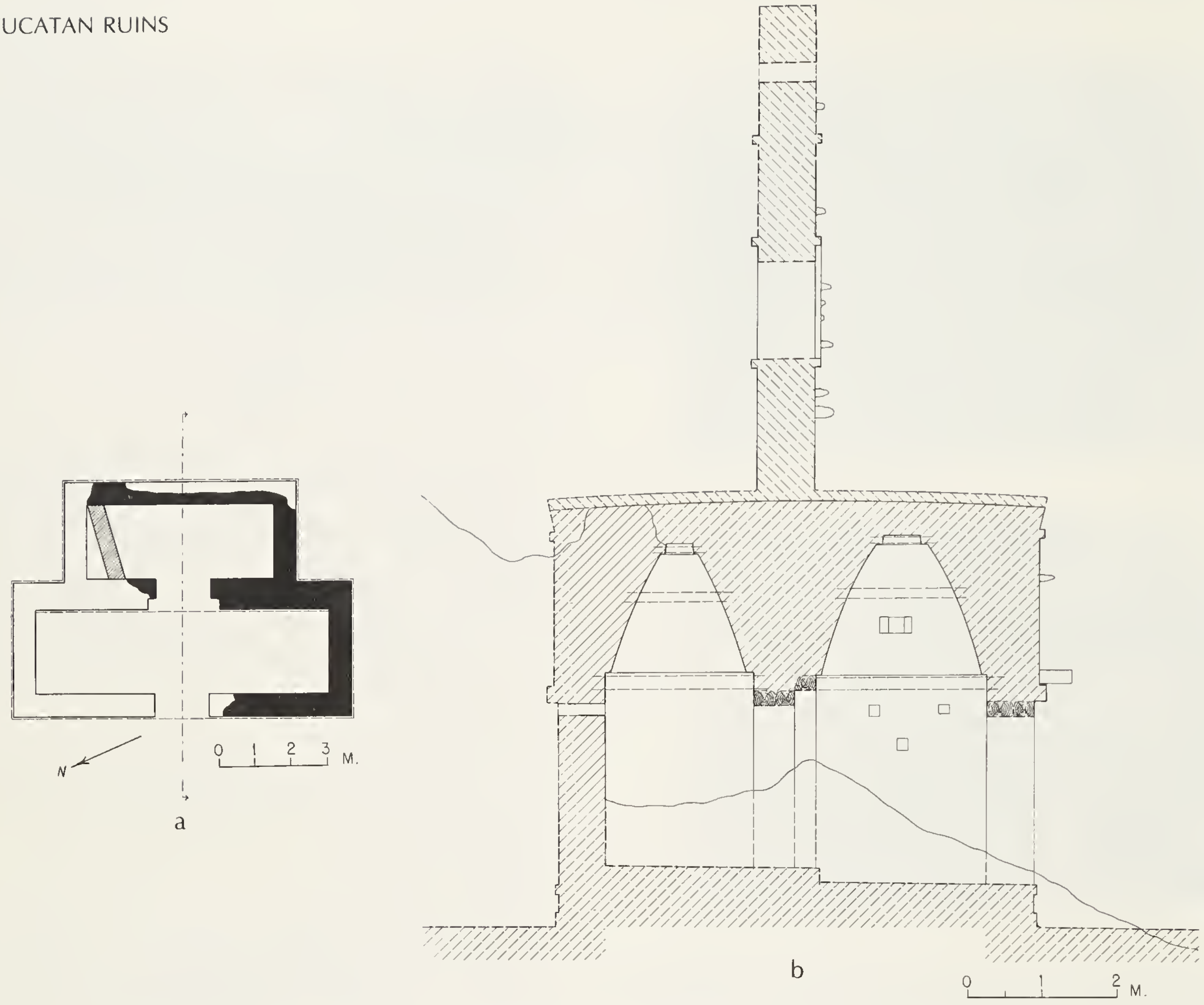


Figure 444. Uxmal, House of the Old Woman, Lower Temple: a, plan; b, east-west section.

LOWER TEMPLE OR IGLESIA

SUPERSTRUCTURE

Plan. See figure 444a.

Section. See figure 444b.

Elevations. See figure 445. Partially restored.

Base Molding. Three-member molding with middle member presumably plain (figs. 444b, 445), but only .50 m or so of molding exposed at corner, so cannot be certain.

Walls. Outer walls .64 m thick; medial wall .85 m at jamb, .78 m at corner.

Outer facing stone fairly well dressed but poorly fitted (figs. 446a, 447a); inner facing of normal rough dressing, poorly fitting (fig. 446b), i.e., average Puuc. Break in construction below molding or two courses below spring.

Doorways. No trace of outer doorway. Inner doorway has pilaster variety of jambs (fig. 444). Stone in main part of jamb normal full-width Puuc. No sign of lintels and probably of wood.

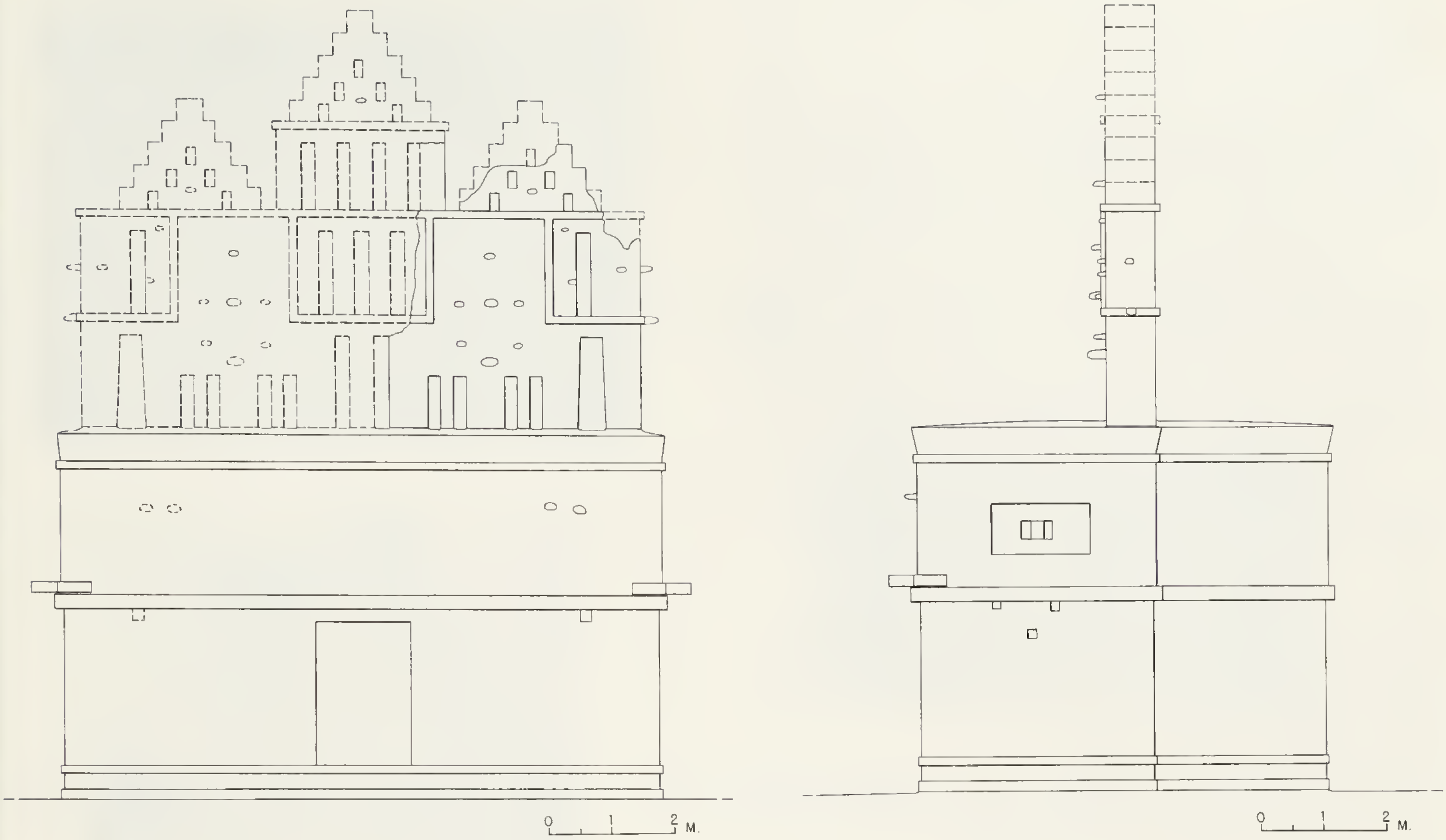
Wall Openings. Many windows or ventilators. Five in south end of front room (figs. 444b, 445b, 446b). Small square windows just below medial molding in front and rear walls near south end of front room, and three spaced along rear wall of rear room.

Vaults and Beams. Fair amount of specialization of vault stone but not well cut, faced, or fitted (fig. 446b). Capstones of fairly well-cut slabs, but not well faced or fitted. Normal curve to soffit slopes (fig. 444b).

Probably were four beams below spring with considerable space between middle beams. Two beams at two-thirds height of vault. Two or three beams in offset course beneath capstones.

Moldings. Simple rectangular medial molding (figs. 444b, 447a). Two-member cornice molding; upper member increased in height at later date by addition of new coping course (see Roof, below).

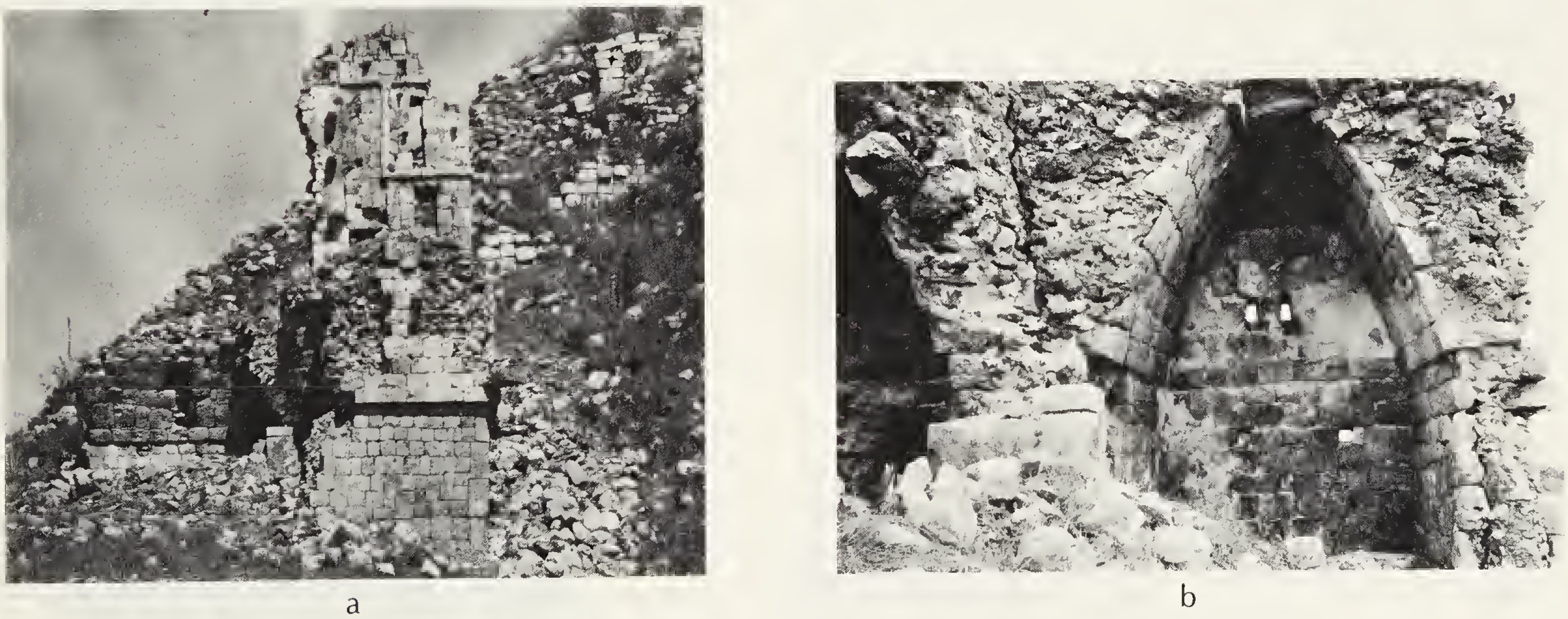
Roof. Appear to be two finished roof surfaces: (1) at level of top of primary coping course, (2) .14 m higher at



a

b

Figure 445. Uxmal, House of the Old Woman, Lower Temple: a, restored west elevation; b, restored south elevation.



a

b

Figure 446. Uxmal, House of the Old Woman, Lower Temple: a, remains of west facade, looking east, and showing rear soffit of rear vault and standing portion of roof comb; b, south end of front room, looking south, and showing wall openings and section of vault.

base of roof comb and at top of added coping course (fig. 444b).

Roof Structure. Perforated roof comb over medial wall of temple (figs. 444b, 445). Windows, long vertical niches at rear (fig. 447b), stone tenons projecting from front, rear, and end (fig. 446a). Complete design of roof comb not certain, as less than half of structure remains. Traces of stucco with red and green paint on all sides.

Decoration. Sunken panel with traces of stucco modeling in upper facade at south end of building (figs. 445b, 447a). Window with colonnette between openings at center of panel. Tenons that once presumably supported stone or stucco sculpture in upper facade at front (west) and at corner of temple (figs. 445, 446a).

Traces of red paint in sunken panel and on wall and vault faces inside rooms. Traces of red and green paint on upper facade area (and see Roof Structure, above).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Lower Temple presumably rests on own small pyramid or platform and antedates present large pyramid. Proof of such stratigraphy can come only with excavation, but sequence seems highly probable.

Secondary roof to support roof comb suggests lapse of time between construction of temple and of roof comb, but could have been a continuous effort.

Small secondary wall, made of stone laid in mortar, in rear room is inexplicable.

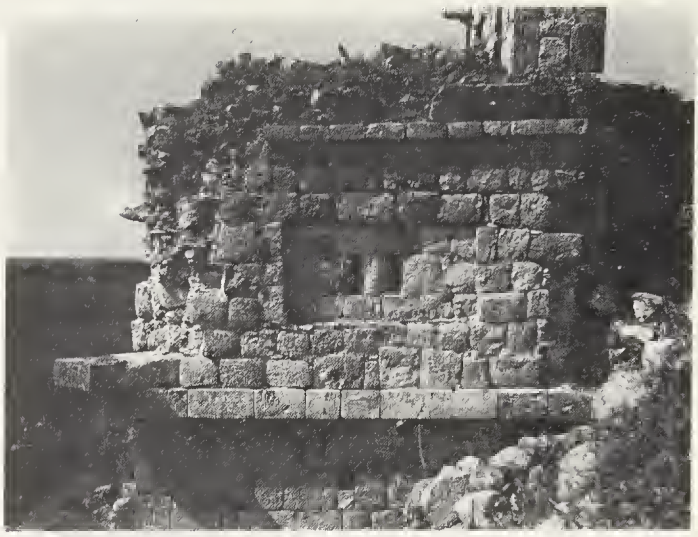
Other Buildings

Ranges of rooms along west and north edges of low platform form court north of House of the Old Woman. Buildings badly fallen.

Standing fragment of West Range shows high narrow vault, three-member medial molding with colonnettes in middle member (fig. 448), and upper facade both plain and with colonnettes. Stone work slightly better than average quality.

Badly fallen Two-Story Building just north of Lower Temple of House of the Old Woman. Vaulted passage beneath stairway and room behind passage still visible. Wide doorway (2.05 m) with wooden lintels. Masonry of about same quality as that in West Range.

In 1948 Alberto Ruz (1948, pp. 21–25; 1953, p. 331; 1964, p. 235; and see Mexico 1956a, pp. 42–43) excavated "a mound located 45 meters west of the Pyramid of the Old Woman, and approximately at the axis of the same." The excavations disclosed a small square platform, 9 m on a side and 2.30 m high, with a stairway on each side and of a type commonly known as a ceremonial or dance platform. The lower part of the walls of the structure are battered, and Ruz believes that the upper part, now entirely fallen, once formed a heavy molding that over-



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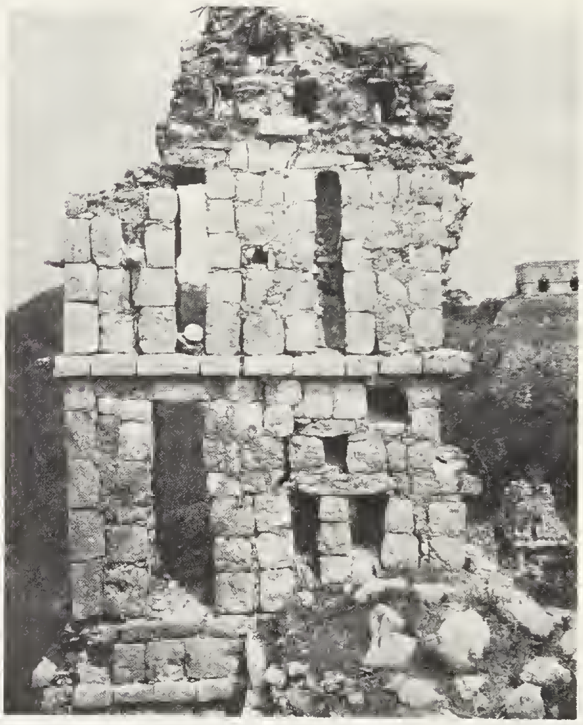


b

Figure 447. Uxmal, House of the Old Woman, Lower Temple: a, upper part of south facade at southwest corner, looking north, and showing sunken panel and windows; b, rear of roof comb, looking west.

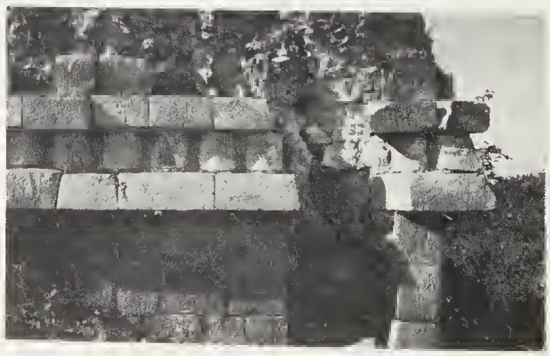


Figure 448. Uxmal, Group of the House of the Old Woman, West Range. Medial molding at southeast corner, looking north.

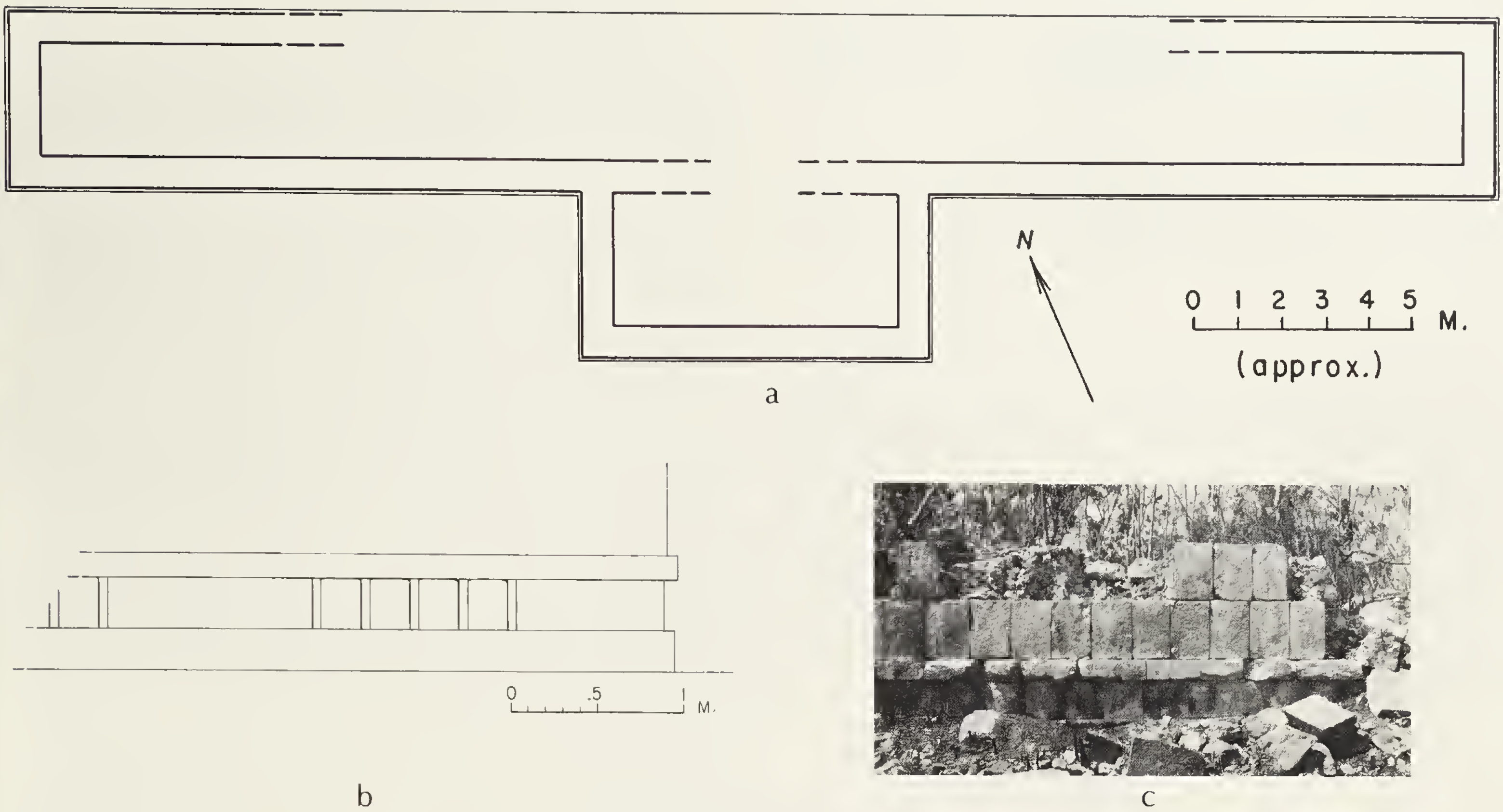


Figure 449. Uxmal. Unfinished building: a, sketch plan; b, elevation of base molding; c, base molding and remains of wall at rear of building.

hung the lower sloped wall, the two forming the typical "talud y tablero" profile of the architecture of highland Mexico. Based on this probable design of the platform and on discoveries inside the structure, Ruz concludes the platform is of the Toltec period in Yucatan.

Just south of this platform is the so-called sculpture (M27) of the Old Woman, which Ruz (ibid.) tentatively identifies as representing the Nahua or Huastec goddess Tlazolteotl-Toci, and in any case as being non-Maya. He was informed by the guardians of the ruins that the statue had been found some years earlier on top of the mound. In 1936 the sculpture was lying on the ground, presumably where Ruz found it, and where I photographed it. Another sculpture, M28, was found nearby (see Miscellaneous Sculpture, below).

Unfinished Building

Some 250 m east-southeast of the House of the Old Woman lies the structure that I am calling the Unfinished Building. It does not show on any of the maps of Uxmal, but may be located on the Tulane map (fig. 388) by the following coordinates: 280 m north of latitude 20°21′15″, 135 m west of longitude 89°45′00″. Possibly of more practical use in actually finding the building at the site is to place it about 170 m west and very slightly south of Group 9, and the same distance north and very slightly west of Group 10 (fig. 388). Location of the structure was ascertained by compass sights on four prominent features and subsequent plotting of those angles on the Tulane map.

SUPERSTRUCTURE

Plan. See figure 449a. Sketch plan.

Base Molding. Three-member molding with groups of four colonnettes separated by plain areas in middle member (fig. 449b,c; and cf. fig. 443).

Walls. Rear wall .75 m thick. Finely dressed, finely fitted, good-sized stone running about .30 m by .40 m (fig. 449c). Best quality of masonry.

Construction. No front wall at center of building, and no inner transverse walls in front gallery. Wall stands three courses (1.30 m) at highest point. Very little debris (0 to 1 m deep) in building. Structure could not have been vaulted and apparently never finished (cf. Kabah, Str. 2C7, and House of the Old Woman, Upper Temple, above).

Temple of the Chanchimez or Chimez

This complex is described by Blom (1934, p. 59), who wrote: "One of the major groups of buildings which lies close to the south of the Quadrangle of the House of the Pigeons [fig. 388], is the great terrace mound with many buildings which the government caretaker has called 'Chanchimez.' " Ruz (Mexico 1956a, p. 45) states that the Maya word *chimez* means centipede, and I assume that *chanchimez* means little centipede. Graham has recently mapped the group and his plan (Graham in prep.) confirms Blom's estimate of its size and importance. My notes deal only with the principal building in the group, a badly fallen two-story structure.

Eight sculptured stones (M29–36) and 4 altars (Altars 11–14) lie in a lower court in front (north) of the main building (see Miscellaneous Sculpture and Monuments, below).

SUPERSTRUCTURE

Plan. See figure 450. Without excavation, plan of front room of upper story obscure. Two central columns in position. Column drums of same diameter in fall before first story. Fragment of west end wall of front room visible, but no signs of transverse walls dividing long chamber into more than one room. Entrance may have been colonnade as shown in figure 450, or may have consisted of three separate doorways of two columns each. If front vault was more than one room, divisions are not apparent.

Section. See figure 451.

LOWER STORY

Base Molding. Originally of three members, the lower member being subsequently hidden by secondary floor (figs. 451, 452). Upper and middle members are decorated.

Stairway. Rises to second story over vaulted passageway (figs. 451, 453). No steps in place now visible. Apparently riser of about .25 m. Side walls of staircase of faced stone and seem to have carried some decoration as witnessed by molding and recessed panel.

Floors. Secondary floor .24 m above primary one observed in passageway under staircase (fig. 451). Both floors between red and buff in color. May originally have been red. Rise in level to floor of Room 2 (fig. 452a).

Walls. Typical average Puuc inner facing stone, roughly cut and poorly fitted. Only outer-wall facing visible is decoration which is well cut and dressed and rather well fitted (figs. 453, 455a). Front wall .61 m thick at jambs.

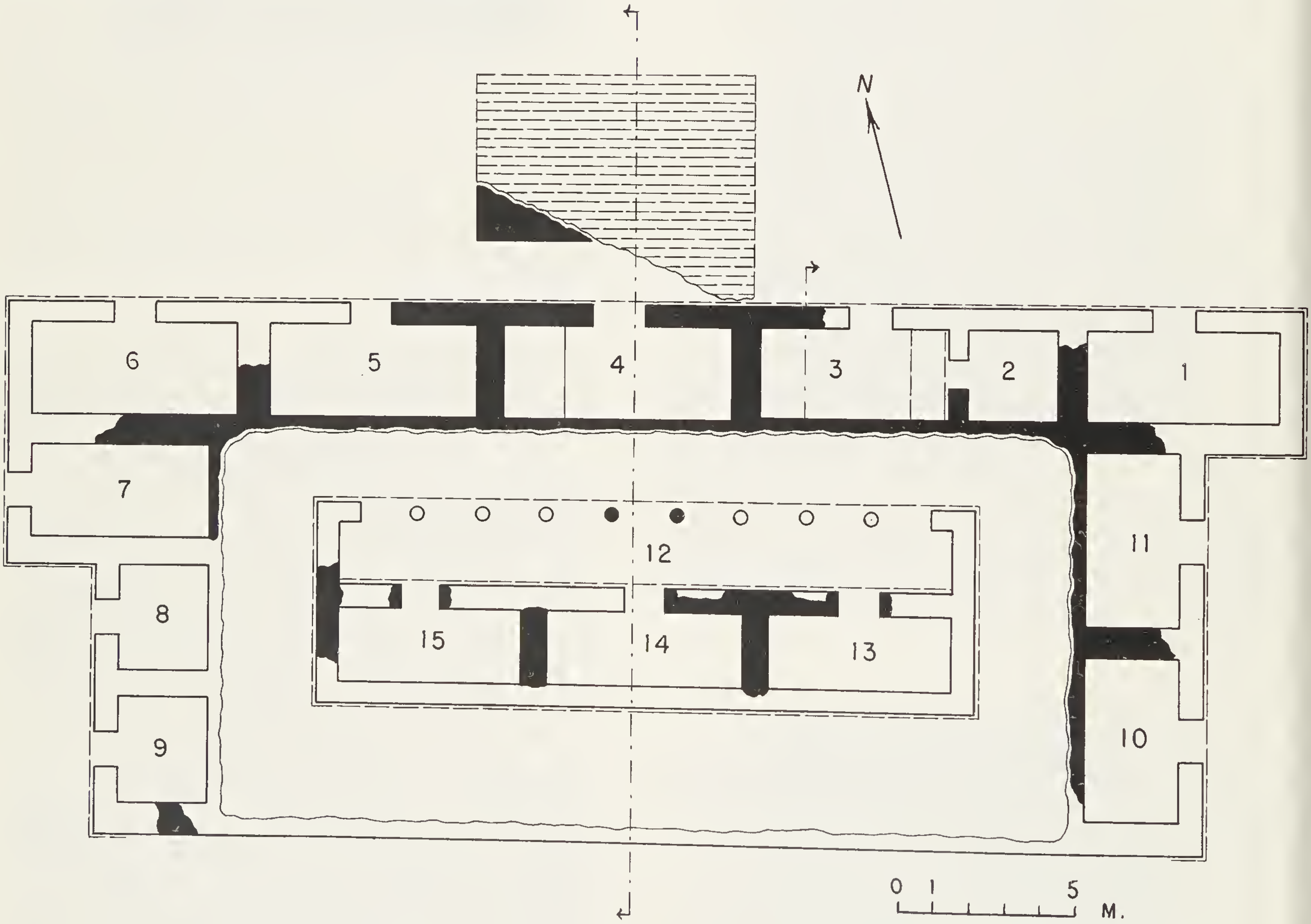


Figure 450. Uxmal. Plan of Temple of the Chanchimez.

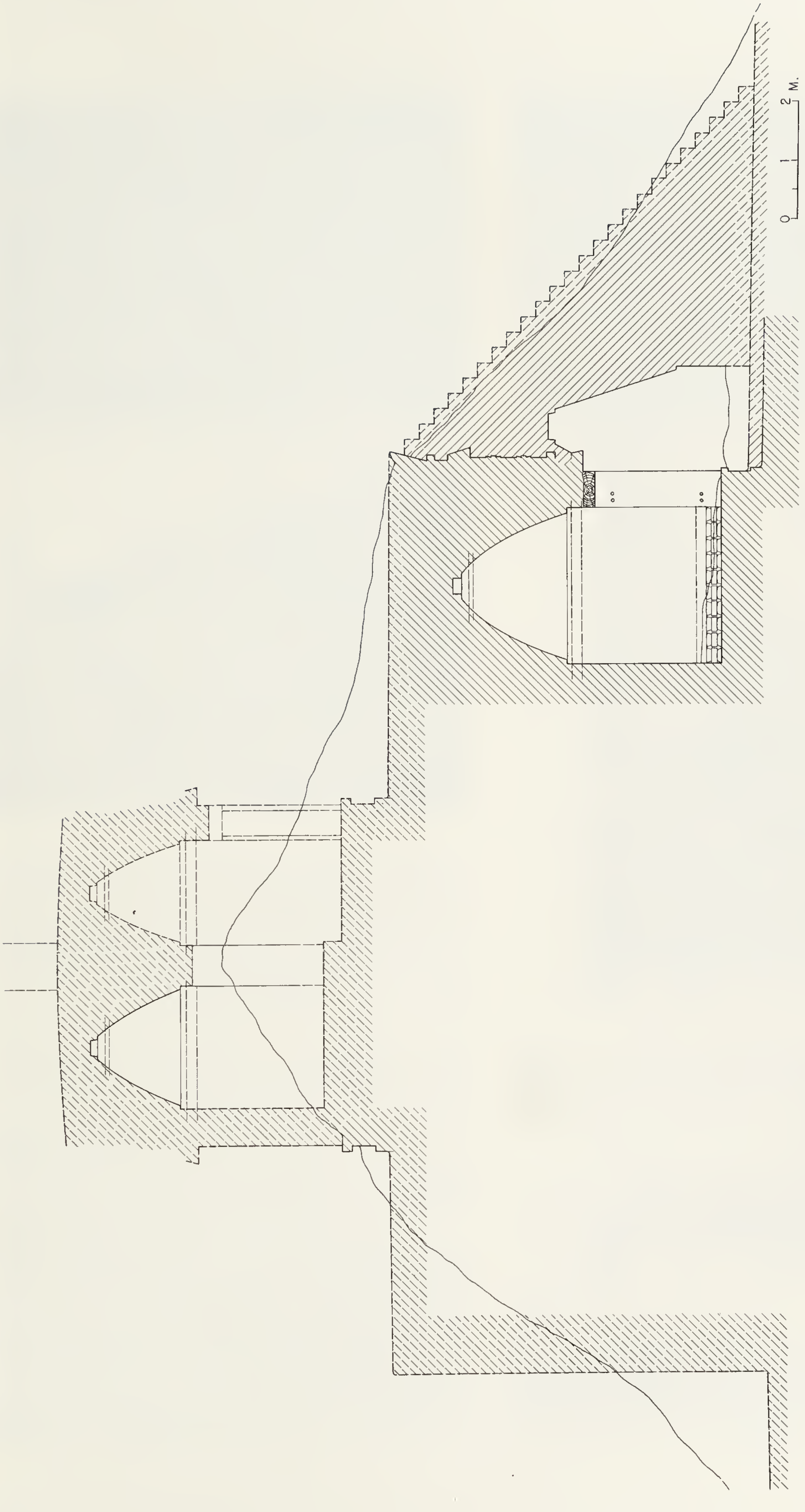


Figure 451. Uxmal, Temple of the Chanchimez. Section through Rooms 4, 12, 14.

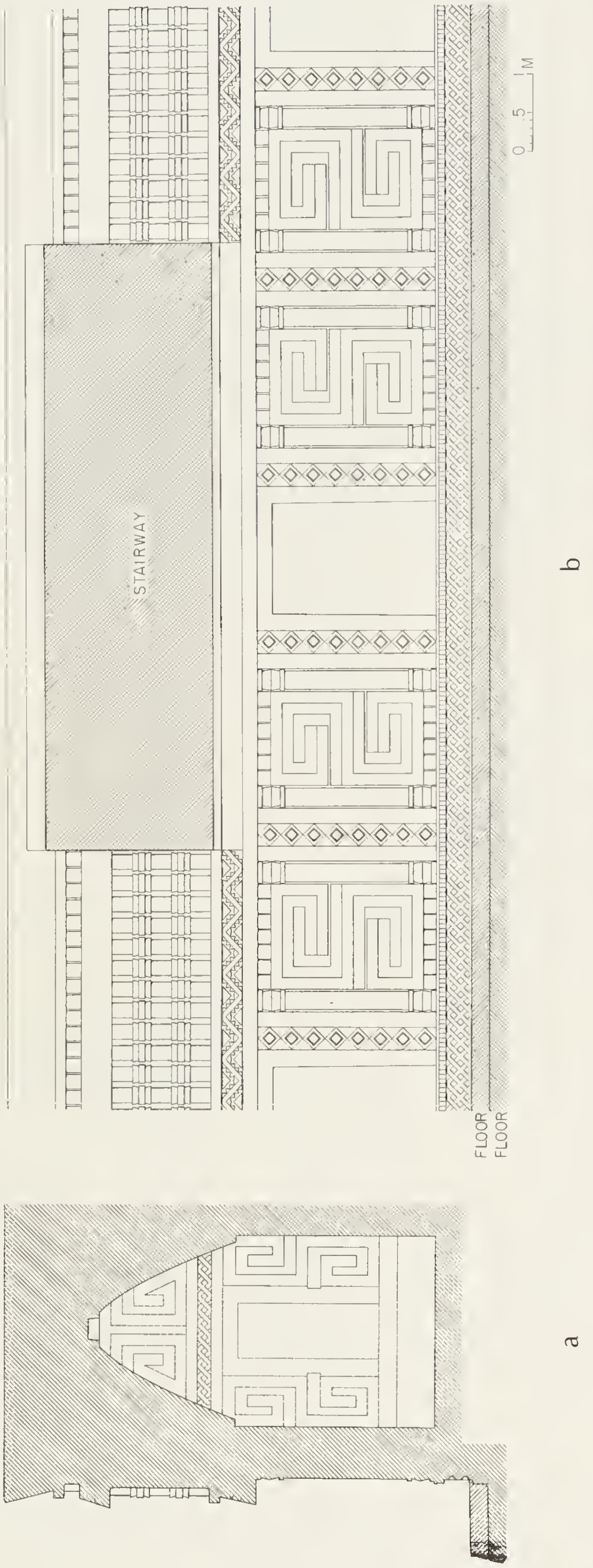


Figure 452. Uxmal, Temple of the Chanchimez: a, section through Room 3 with east end of room in elevation; b, elevation of north facade between doorways to Rooms 3 and 5 (see fig. 450).

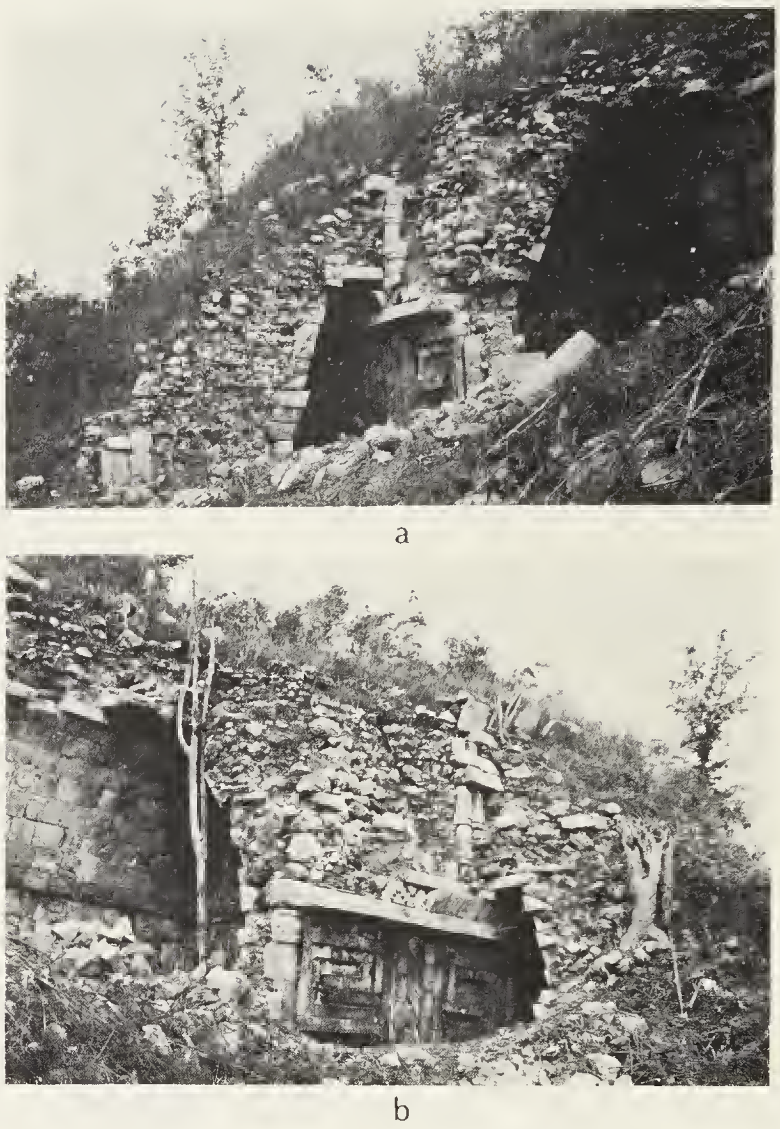


Figure 453. Uxmal, Temple of the Chanchimez. Views of stairway and vaulted passage beneath it: a, looking southeast, and showing fragment of decoration on staircase, remains of decoration on north facade, and partly fallen vault of Room 5; b, looking southwest, and showing facade decoration, moldings, and remains of vault of Room 3.

Other walls run .80–1.0 m thick. Normal break in construction below medial molding.

Doorways. Full-width jamb stones of normal type. Only remaining lintel a single great wooden beam over center of front doorway. Doorways taper about .05 m from bottom to top.

Wall Depressions. Two-tongue variety of cordholder. Hemispheroid rod sockets in jambs of central doorway (fig. 451). Pair about .05 m apart toward inner edge of each jamb and about .30 m from floor and .30 m from lintel. One example .04 m deep.

Benches. Bench about .50 m high across east end of Room 3 (figs. 450, 452a).

Bench with line of spools across face at west end of Room 4 (fig. 451). Spools presumably surmounted by

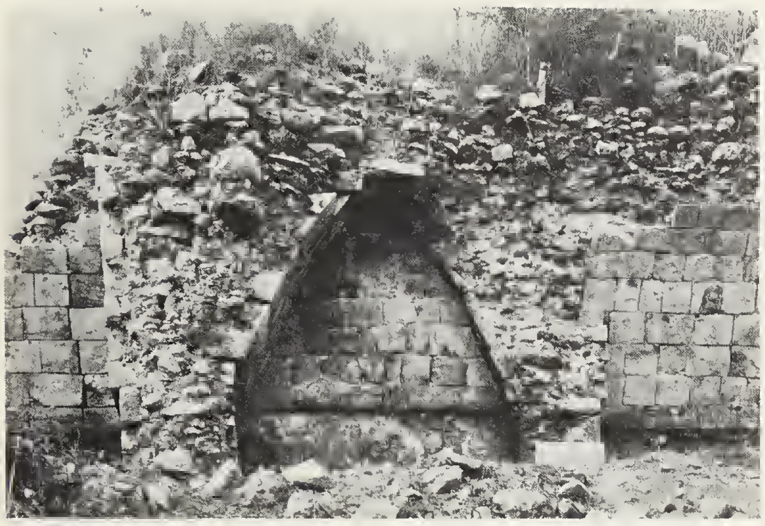


Figure 454. Uxmal, Temple of the Chanchimez. Remains of vault of Room 2, seen in section, and south soffits of vaults of Rooms 1 and 3, looking south.

molding now missing. Spools .25 m high, .25 m in diameter, and identical to those in banded columns on exterior facade (fig. 452b). Molding at top of bench face seemingly about .18 m high.

Vaults and Beams. Moderately well-cut and faced, fairly well-fitted vault stone of average specialization (figs. 453, 454). Typical Puuc vaulting. Considerable curve to soffit slopes.

Beams seem to have been arranged two below spring of vault, four below offset under capstones in each room (fig. 451).

Moldings. Three-member medial molding with decorated middle member (figs. 452, 455a). Cornice molding of four members (fig. 452). Lowest member formed of two courses; second member of colonnettes (fig. 453b).

Decoration. Fret, colonnette, banded column, and diamond design on wall at each side of doorway to Room 4 (figs. 452, 453, 455a). Banded columns, presumably continuous, on upper facade zone at each side of, and beneath, staircase. No other exterior wall visible.

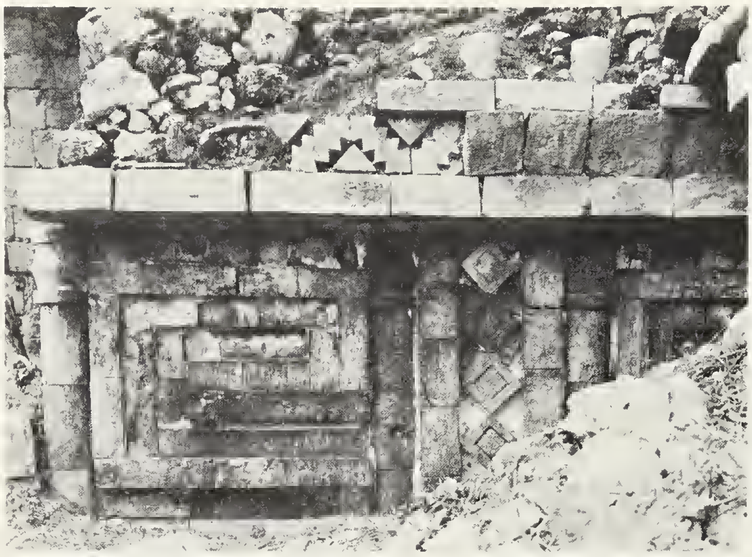
Fret and X or basket weave decoration at side and above doorway to Room 2 (figs. 452a, 455b). Also see Benches, above.

UPPER STORY

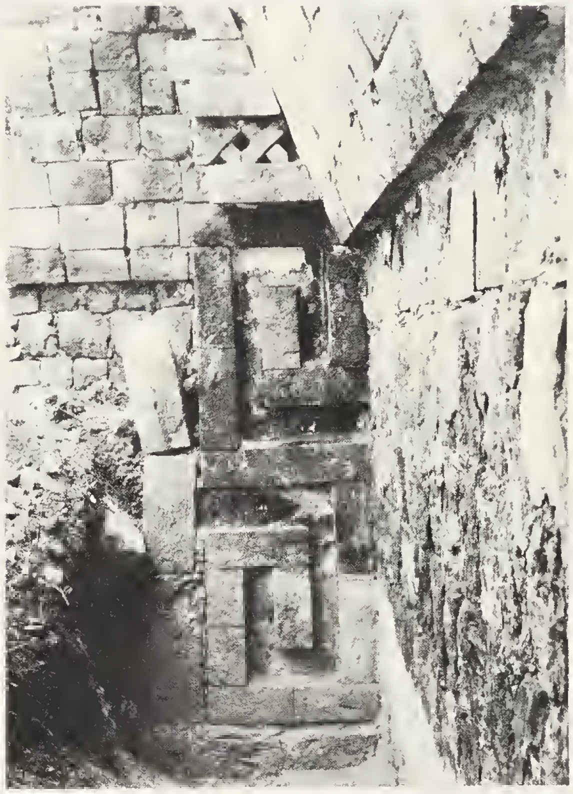
Base Molding. Three-member molding with groups of three colonnettes separated by plain areas in middle member (fig. 456) seen at rear of building.

Walls. Outer facing of rather well-cut and dressed, moderately well-fitted stone. Inner wall facing like that of lower story, but with use of some outer facing stone (excess of outer stone?). Average Puuc wall masonry. Break in construction one course below spring of vault.

Outer end wall .65 m thick; medial wall .70 m thick; transverse walls .77 m and .80 m. No front or rear wall visible.



a



b

Figure 455. Uxmal, Temple of the Chanchimez. Decoration: a, lower facade and fragment of medial molding outside Room 3, looking south; b, east wall of Room 3 and south jamb of doorway to Room 2, looking east into Room 2 (cf. fig. 452a).

Doorways. Front entrance either colonnade or several columnar doorways (see Plan, above). Columns rather slim, .43 m diameter, and straight sided with little or no entasis. One drum .95 m high.

Jambs of doorways in medial wall are normal classic Puuc, some possibly formed of single stone. No lintels visible.

Vaults. Same as those in lower story. Front and rear vaults spring from same level (fig. 451).

Roof Structure. Trace of roof comb with masonry of dressed stone over medial wall.

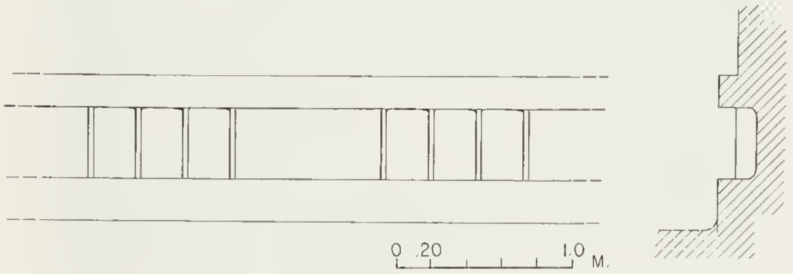


Figure 456. Uxmal, Temple of the Chanchimez. Elevation of base molding on upper story.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Staircase built against facade of lower story and clearly secondary to it. Somewhat eccentric plan of lower story suggests building may have grown by stages, but all transverse and medial wall masonry seems to indicate single period. With exception of columns in front entrance, masonry of upper story seems of same quality and period as that of lower story.

GROUP 18

A little over 300 m west and slightly south of Chanchimez are some remains labeled Group 18 on the Tulane map (fig. 388). Blom (1934, fig. 12 and p. 59) illustrates a doorway and fragment of upper-facade decoration of a building there. The doorway is spanned by a heavy stone lintel, and the jambs seem to be of normal Puuc construction employing full-width stones. The medial molding, which turns a corner in the picture, is of three-member variety, with colonnettes in the middle member, over the doorway; on a wing of the building that projects at right angles to the doorway, the molding becomes two-membered, the colonnettes being replaced by a second course of the lower apron member. The upper facade over the doorway carries a geometric design of diamonds and triangles. The stone work, which is not well shown in the illustration, seems to be of average Puuc quality. Blom (ibid.) says that this building also had "a doorway with round columns."

My brief notes carry a rough sketch of the molding with colonnettes and of the facade decoration. They also carry the entry: Door with one column standing at front of same building. May originally have been one or two columns.

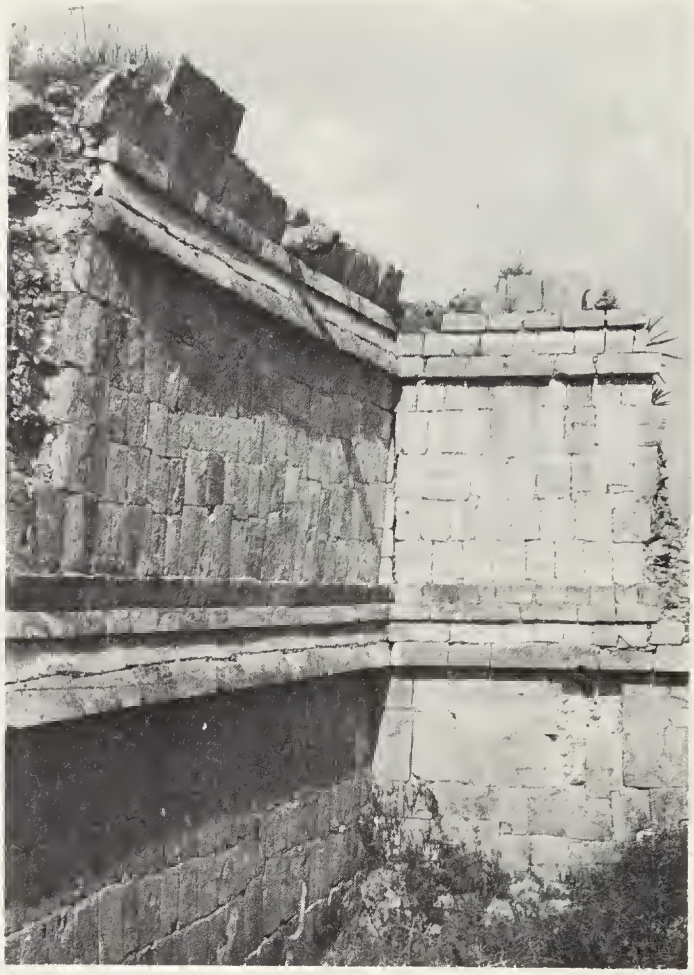


Figure 457. Uxmal, Phallic Temple. View of rear wall, looking east, and showing phallic waterspout projecting from cornice molding.

Phallic Temple or Temple of the Phalli

Some 250 m east-southeast of the Chanchimez Temple and approximately 500 m south of the Governor's Palace is a badly ruined building (fig. 388) that derives its name from a waterspout in the form of a phallus that projects from the lower of two courses that form the top member of the cornice molding (fig. 457). Presumably there were originally more of these spouts spaced along the molding. The building, which has received little attention, is best described by Erosa (1947, pp. 49–50; 1948, pp. 49–50) and by Ruz (Mexico 1956a, p. 45). My extremely brief notes follow:

> The [Temple of the] Phalli is normal Puuc with stone work slightly above average, even inner facing being good. The one remaining phallus, projecting from the cornice, is a waterspout, a canal being cut in the back.

Marquina (1928, p. 65 and plates immediately preceding), using the Amabilis drawings, describes and illustrates similar waterspouts on the House of the Turtles, but they are mentioned by no other writer, and there is considerable question if the Amabilis drawings are correct.

GROUP 17

A small group of buildings located some 400 m southwest of the Chanchimez Temple (fig. 388). Group consists of a southern court that is raised above, and faces on, a somewhat larger northern court (fig. 458). Only the western

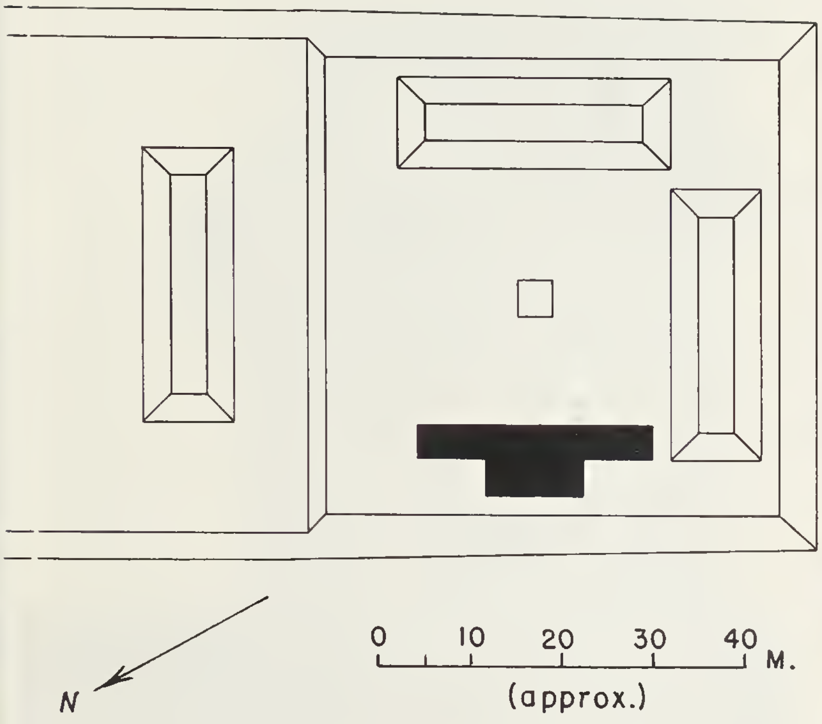


Figure 458. Uxmal, Group 17. Sketch plan of group.

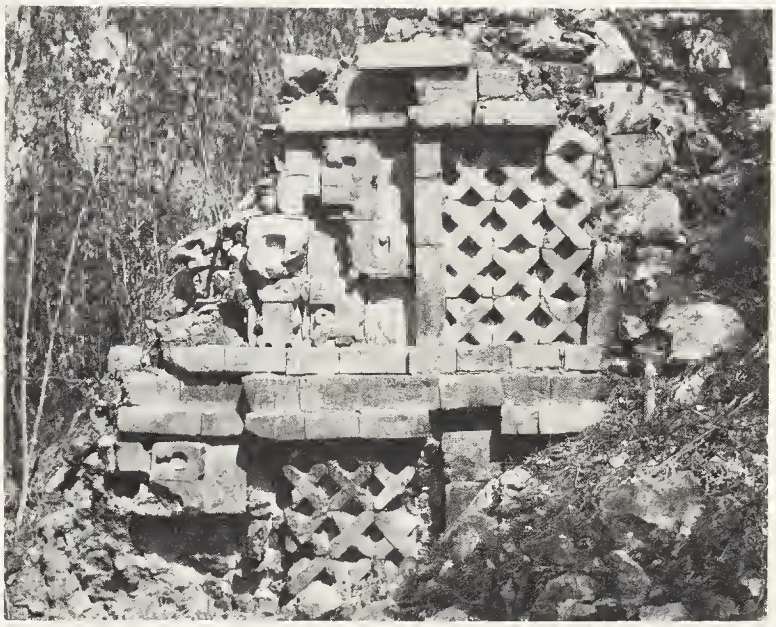


Figure 459. Uxmal, Group 17. Remains of west facade of building in North Court.

building on the southern court is sufficiently well preserved to offer any architectural detail without excavation, but fallen elements of decoration in the debris of the East Building seem to be identical to decoration on the West Building. At the center of the court are the remains of a small platform. The northern court was not well explored, and I have only one photograph (fig. 459) and no notes on the one structure shown on the plan of the group. The decoration is somewhat reminiscent of that on the Outer West Building of the House of the Magician (see above).

Two identical altars, nos. 8 and 9, located before the East and West Buildings, were found in the southern court (see Monuments, below).

West Building ?

SUPERSTRUCTURE
(fig.461)

Plan. See figure 460.

Base Molding. Nowhere visible.

Walls. Construction typical Puuc in every respect and of average quality (figs. 462a, 463). Outer walls .65–.70 m thick, transverse inner walls .75–.80 m, medial wall 1 m.

Doorways. Probably three entrances to front center room, but may have been two, or may have been colonnade. Last possibility unlikely.

Vaults. Like walls, typically Puuc.

Moldings. Simple three-member moldings (fig. 462). Pretty surely a coping course, now missing, as shown by height of roof masonry. Coping presumably about same height as course beneath.

Roof Structure. Photograph of building (fig. 461) seems to show base of roof comb over medial wall, but my notes carry no reference to such construction.

Decoration. Groups of three colonnettes in upper wall zone between tiers of masks on east facade (fig. 463) and between corner masks on north facade. Rear (west) of building without decoration (fig. 462a) except for masks at northwest and southwest corners. Masks on east facade interrupt cornice molding and seem to have risen above roof level (cf. Xlabpak, Structure 1, figs. 118, 120, 125–127).

GROUP 14

At Group 14, 900 m southeast of the Phallic Temple (fig. 388), Blom (1934, p. 58) reports, "an old building with a roof, which partially had been covered by a later structure. In one of the rooms of the older structure we found that high up on the arch of the room were tenons, carved like the feet of an animal, protruding from the face of the sloping wall" (ibid., fig. 11).

Such tenons, which appear to represent human feet, are not uncommon in Puuc buildings. The photograph shows rather rough vault masonry, but nevertheless characteristically Puuc in design and execution.

Triumphal, Ceremonial, or Formal Arch

Concerning his explorations of Uxmal in 1930, Blom (1934, p. 58) reported, "At some distance to the south we found standing on a hilltop a small 'Triumphal Arch' similar to those at Kabah and Labna, but much less ornate." The archway apparently lies off the southern edge of the Tulane

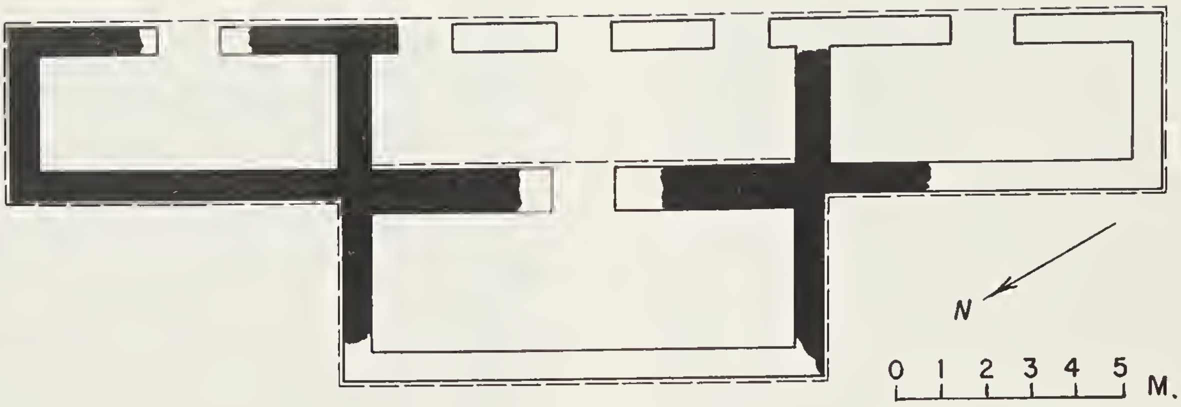


Figure 460. Uxmal, Group 17. Plan of West Building.

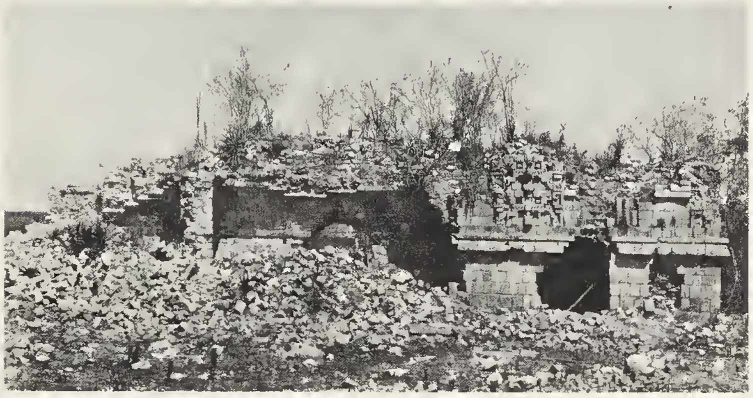


Figure 461. Uxmal, Group 17, West Building. View of front of building, looking west, and showing facade outside north room and remains of vaults of center and south rooms.

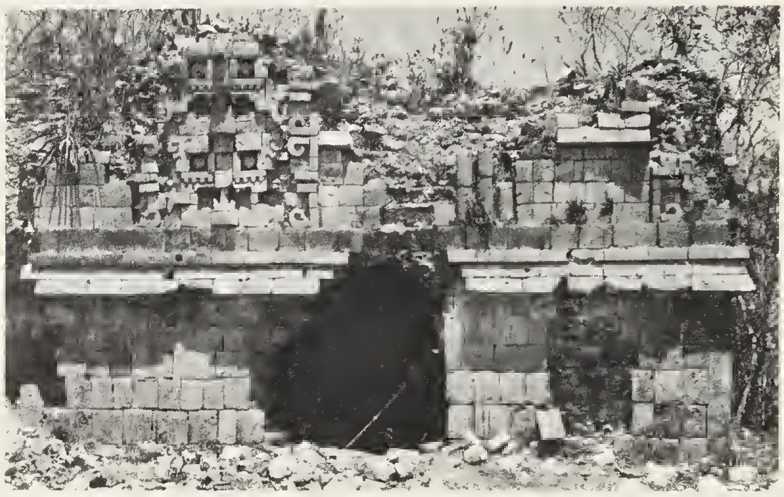
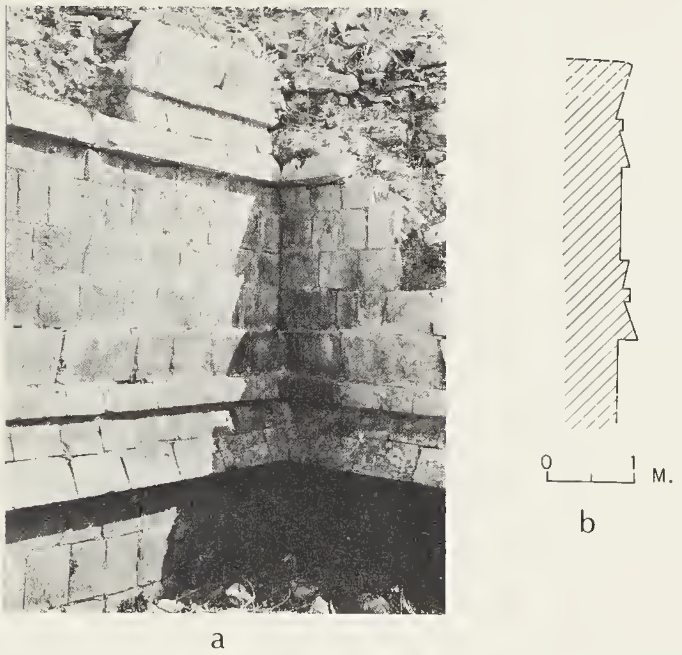


Figure 463. Uxmal, Group 17, West Building. East facade outside north room, looking west, and showing moldings and decoration.



a

b

Figure 462. Uxmal, Group 17, West Building: a, rear of building, looking south to angle between north and rear rooms; b, section of upper facade at rear.

map (fig. 388), but arrows on the map point to a location 1.4 km south of the Governor's Palace. In 1953 A.L. Smith and Ruppert (1954) found an archway that they report to be 3 km south of the Governor's Palace. Ruz (Mexico 1956a, p. 47) refers to an isolated arch "about half a mile to the south of the Palace of the Governor along the road leading to the Hacienda of San Simón."

I cannot explain the rather large differences between the several writers in locating what seems probably to be the same archway. It is, of course, possible that more than one arch is involved, but I doubt it. Smith and Ruppert (1954) give a detailed report on the structure.

MISCELLANEOUS SCULPTURE

Quite aside from the immense amounts of facade decoration—most of it geometric—that has been found in the debris of collapsed and collapsing buildings, there are numerous pieces of sculpture at Uxmal that have been discovered no longer *in situ* and sufficiently out of context, possibly owing to lack of excavation, so that the original

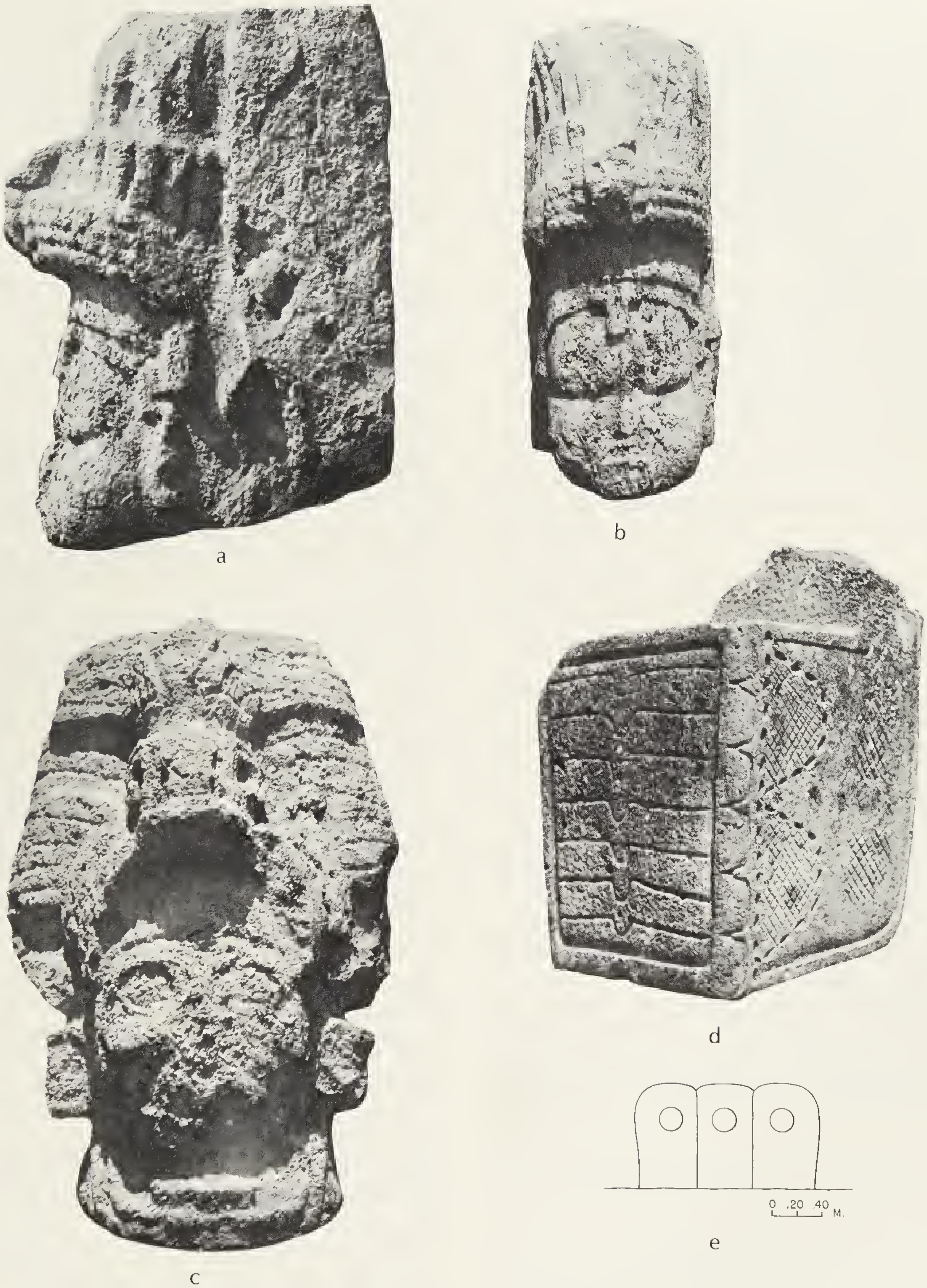


Figure 464. Uxmal. Miscellaneous sculpture: a, M4, stone head, profile; b, M4, front view; c, M5, stone head in mouth of reptile; d, M8, stone carved with markings of serpent; e, M10, stone with three holes cut through it.

function and meaning has been lost or at best can only be surmised. Many other pieces are no longer at the site, and only a few of these, notably the Stephens sculptures in the American Museum of Natural History (Spinden 1920), are sufficiently well documented to know their original location and function. I am calling Miscellaneous Sculpture all these sculptures that are so out of context that their purpose is not readily understandable, and that at the same time do not seem to fall into our category of Monuments (i.e., stelae and altars).

I am aware that the list is by no means complete, that there are undoubtedly examples in museums and private collections of which I do not know, and that there almost surely are pieces at the ruins that I have missed. Nevertheless, it seems to me useful to start a list of sculptures to which others can add.

M1–3. These stones, which are described by Morley (1970, pp. 160–161), are located on the Terrace of the Monuments. I consider M2 to be an altar rather than miscellaneous sculpture and list it as Altar Z (see Monuments, below).

M4. Stone head (fig. 464a,b) .65 m high. Found in northeast corner of Court I of the North Group (fig. 390). Stone badly weathered but head is probably that of a human.

M5. Stone head in mouth of reptile (fig. 464c) .88 m high. Found in passageway through Structures 4 of the North Group (fig. 390). Sculpture badly weathered. Head could be either human or monkey.

M6. Stone ring with human figure wearing deer headdress (see Maler 1912, 2d ser., pl. 4). Total height of stone 1.05 m, width from knee to opposite edge .55 m.Found near southwest corner of Platform 3 in Cemetery Group (see p. 224).

This sculpture is described and illustrated by Seler (1917, p. 151). There is also an early photograph published by Rickards (1910, p. 36).

M7. Stone cylinder or drum with projection at each end and carving on side (see Maler 1912, 2d ser., pl. 4). Height of drum .58 m, diameter .65 m. Found near southwest corner of Platform 3 and beside M6 (see above). Sculpture is described and illustrated by Seler (1917, p. 151).

M8, 9. Two rectangular stones with low relief carving of markings on serpent's body (fig. 464d; and see Maler 1912, 2d ser., pl. 5).

So far as I know, these stones are first recorded in Maler's photograph where they are shown resting on east wall of Platform 3 in Cemetery Group (see p. 224). I observed only M8, shown here. Seler (1917, p. 152) describes these pieces.

M10. Relatively thin upright stone, perforated by three, well-cut, circular holes (fig. 464e; and see Maler 1912, 2d ser., pl. 8). Maximum width 1.47 m, height above present ground level .84 m. Located on low platform on eastern side of court of Cemetery Group (see p. 220).

This stone is in some ways comparable to a stela and might be classed as a monument. Lacking any knowledge of its function, however, I think it better, for the present, to call it a miscellaneous sculpture. Seler (1917, p. 152) mentions and illustrates the stone, but makes no guess as to its function.

M11. S. G. Morley wrote in his 1942 diary of "a large sculptured stone, a meter in diameter and circular-cylindrical in shape, which appeared to be in situ facing the center of the main entrance, i.e., the south arcade." He is referring to the court of the Cemetery Group, the arcade being the passageway, presumably once vaulted, through the southern range of buildings (see p. 220). The stone he is apparently referring to is seen in figure 402, just south of Platform 4. I have no notes on this piece. Judging by the photograph, it could be an altar, but with no further information it seems better to classify the stone as miscellaneous sculpture for the present.

M12. In the foreground of figure 402 one sees a cylindrical stone located west of Platform 4. I have no notes on the stone. It may be an altar, but I am classifying it as miscellaneous sculpture for lack of information.

M13. Ruz (1955a, p. 50) notes the fragmentary remains of a stone jaguar that once rested on a central "adoratory," or low platform, in the courtyard of the Nunnery Quadrangle.

M14. Human head of stone (see Ruz 1955a, pl. 9) .15 m high. Found in debris at foot of Lower West Building of the House of the Magician. Ruz (1955a, p. 56) describes head briefly and suggests it came from one of the upper temples.

M15. Human head of stone (ibid., pl. 10) .22 m high. See remarks under M14, above.

M16. Human head in serpent mouth (see Sáenz 1969, fig. 1). Found in excavation at north side of Lower West Building (Temple 1) of the House of the Magician. Sculpture is similar to so-called "Queen of Uxmal" (Morley 1956, pl. 74c,d) now in Museo Nacional de Antropologia of Mexico and originally from the House of the Magician (also see M46, below).

M17. Human head in serpent mouth (see Sáenz 1969, photos 9, 10). Found in excavation at foot of south side of pyramid of the House of the Magician (ibid., p. 5). See remarks under M16, above.

M18–20. Stone masks carved in low relief (ibid., photo 11). Found in excavations at base of pyramid of the House of the Magician (ibid., p. 5).

Sculptures represent Tlaloc face with year symbol above and at each side. Seler (1917, p. 92) places an almost identical piece, also fallen, as part of the facade of the Lower West Building (and see Tozzer 1957, 11: 113).

M21. Two-headed jaguar or puma of stone (see Ruz

1955a, pl. 29). Maximum length .98 m, maximum width .38 m. Found buried in small platform near center of great terrace of Governor's Palace (see Stephens 1843, 1:182), and recently placed on top of same platform after reconstruction (see Ruz 1955a, pp. 60–62). Sculpture described and discussed by Seler (1917, pp. 122–123).

M22, 23. Two human heads, presumably of stone. Found by Stephens (1843, 1:184) in small platform on great terrace of Governor's Palace. I do not know the whereabouts of these pieces.

M24. Stone atlantean figure (fig. 465a) .66 m high. Found on surface in southwest corner of court of South Quadrangle of South Group. Crudely executed figure in full round.

M25. Human torso of stone (fig. 465b). Height of carved surface .27 m. Found on surface near M24 (see above). Probably from facade of building but not certain.

M26. Human torso of stone (fig. 465c) with maximum height of .42 m. Found inside West Annex of South Group. Was kept at Government Station at Uxmal in 1936. Probably fallen from facade of building.

M27. Human figure of stone (fig. 465d,e) 1.20 m high, .63 m wide, .42 m thick. Located just south of small platform in front of House of the Old Woman (see p. 257, above).

Sculpture described by Ruz (1948, p. 24) and tentatively identified as representing goddess Tlazoltcotl-Toci. Figure reputedly gives name of "Old Woman" to group (Stephens 1843, 1:320).

M28. Stone carving of headdress (fig. 465f,g) .40 m wide by .42 m deep by .25 m high. Found near M27 (see above). Sculpture better preserved than M27, but also of better quality, and two pieces not necessarily to be associated.

M29–33. Five stones forming horizontal band of hieroglyphs (see Graham in prep., for illustration and measurements). Lying on surface in lower (north) court of Chanchimez group.

Found by S. G. Morley in 1948 (or earlier) and rediscovered by Graham (in prep.) who describes and locates stones on plan of group.

M34. Cylindrical stone with rounded, domed top and constricted neck projecting .45 m out of ground. Diameter .43 m. In court west of M29–33 (see above). Described and located on plan of group by Graham (in prep.).

M35. Cylindrical stone with rounded end separated from shaft by projecting band. Length 1.45 m, maximum diameter .54 m. On low platform in court west of M29–33 (see above). Described and located on plan of group by Graham (in prep.).

M36. Carved stone serpent's head (fig. 466a). Maximum length .58 m. At southeast corner of low platform on which rests M35 (see above).

Head is sculptured on both sides and carries a tenon, now broken. Described and located in court by Graham (in prep.).

M37–41. Seler (1917, p. 154 and pl. 35:2) mentions and illustrates a group of stone phalli, apparently five in number, located near the old road to Santa Elena but without relation to any other remains. These may be the "other monuments lying on the ground" which Stephens (1843, 1:320, 434) places near the House of the Old Woman.

Sometime around 1930 I remember one or more of these phalli (fig. 466b) resting near the southeast corner of the Pyramid of the Magician where it presumably had been brought from its earlier location. Barrera (1950, pl. 67) shows four of the phalli behind a fieldstone wall and near what I take to be one of the government houses at Uxmal.

M42. Grotesque head of stone (see Mexico 1956a, fig. 25). Published without comment other than provenience of Uxmal.

M43. Stone head in serpent mouth (ibid., fig. 26). See M42, above.

M44. Grotesque head of stone (ibid., fig. 27, left). See M42, above.

M45. Human head of stone (ibid., fig. 27, right). See M42, above.

M46. Human head in serpent's mouth (fig. 466c). Present overall height .50 m. Built into stairway at Hacienda Uxmal and presumably from Uxmal ruins.

Sculpture is very like so-called "Queen of Uxmal" (Pijoan 1946, fig. 793; Morley 1956, pl. 74c,d) now in Museo Nacional de Antropologia of Mexico and originally from the House of the Magician.

M47. Atlantean figure of stone (fig. 466d) .80 m high. Found in debris from collapse of wing of main building of Hacienda Uxmal and presumably from Uxmal ruins.

Sculpture is strikingly like figure from Xculoc (Proskouriakoff 1950, fig. 95i) and may be from that site, which is connected with Uxmal by cart road.

M48. Grotesque head of stone (see Lavachery n.d., pl. 17). In Museo Arqueologico de Madrid and attributed to Uxmal. Sculpture described by Lavachery. Piece may be that shown in highly stylized drawing published by Waldeck (1838, pl. 18:1) and attributed to West Range of Nunnery Quadrangle.

M49. Grotesque head of stone (see ibid., pl. 18). In Museo Arqueologico de Madrid and attributed to Uxmal. Sculpture described by Lavachery. Piece may be that shown in highly stylized drawing published by Waldeck (1838, pl. 18:2) and attributed to West Range of Nunnery Quandrangle.

M50. Grotesque head of stone with ring in place of nose (see ibid., pl. 19). In Museo Arqueologico de Madrid and attributed to Uxmal. Sculpture described by Lavachery.

M51. Human head of stone (ibid., pl. 20). In Museo Arqueologico de Madrid and attributed to Uxmal. Sculp-

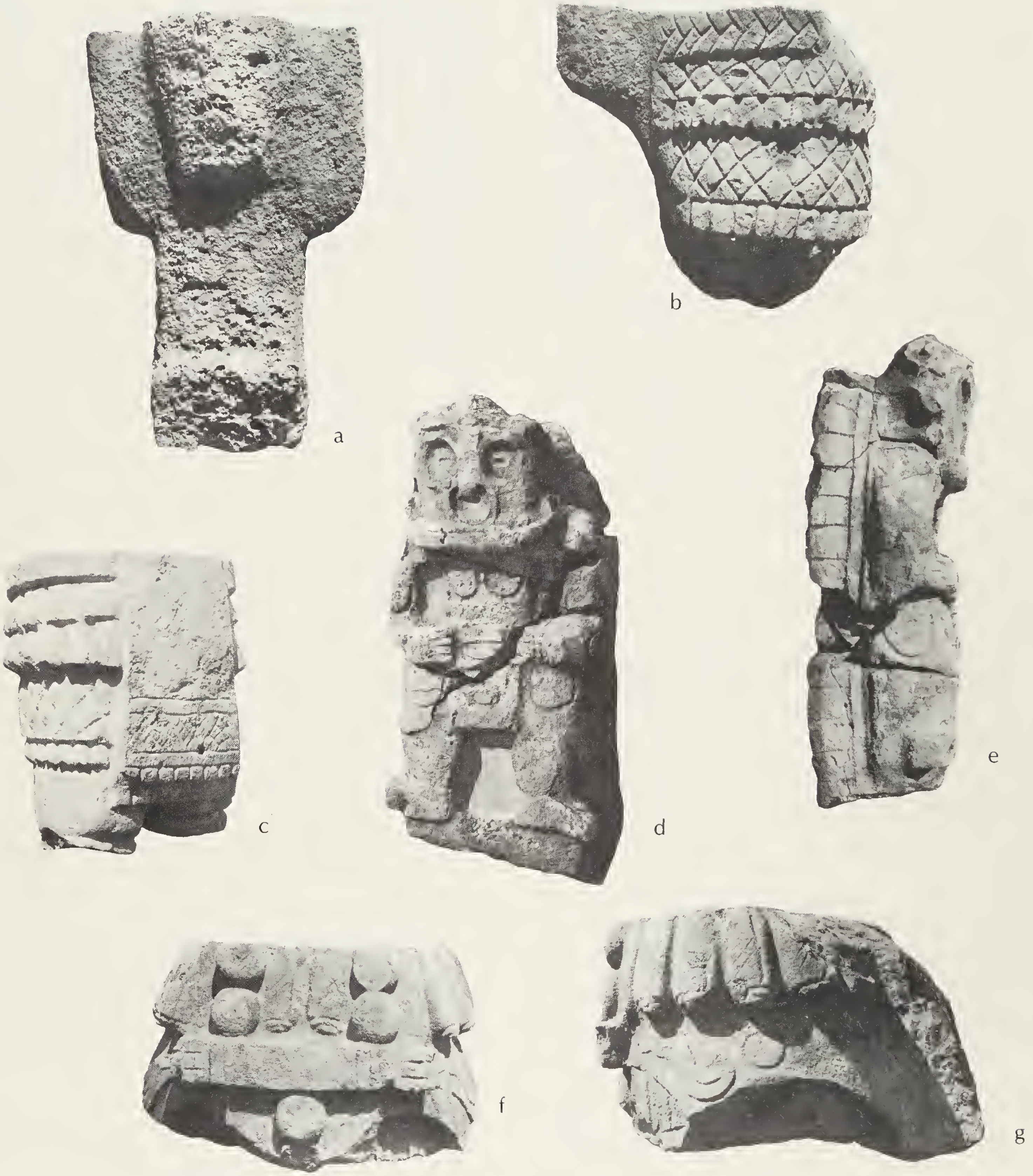


Figure 465. Uxmal. Miscellaneous sculpture: a, M24, stone atlantean figure; b, M25, human torso of stone; c, M26, human torso of stone; d, M27, human figure of stone; e, M27, side view; f, M28, stone headdress; g, M28, side view.

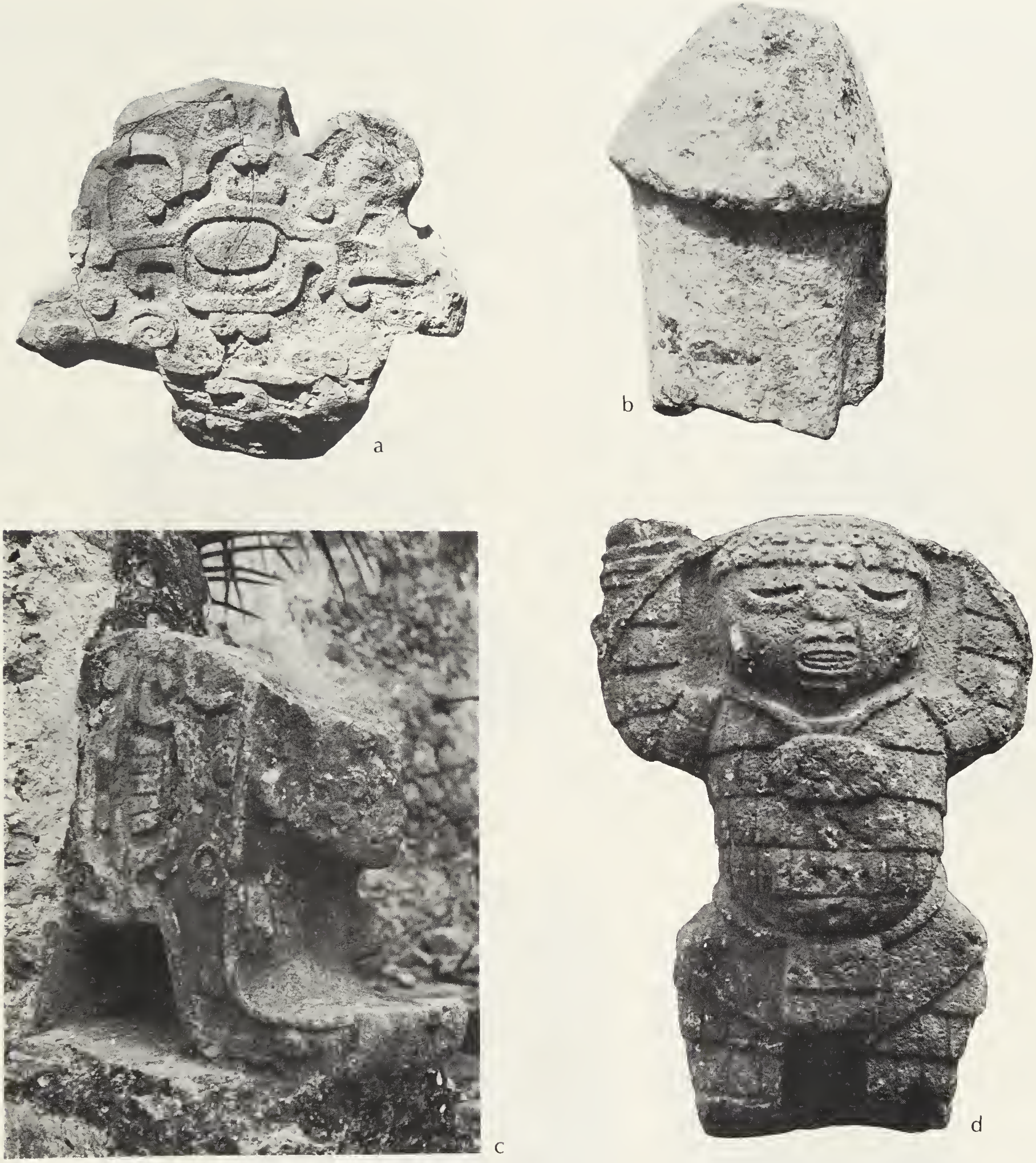


Figure 466. Uxmal. Miscellaneous sculpture: a, M36, stone serpent head (courtesy Ian Graham); b, M37, stone phallus; c, M46, stone head in mouth of reptile; d, M47, stone atlantean figure.

ture described by Lavachery. Piece may be that shown in highly stylized drawing published by Waldeck (1838, pl. 18, no. 3) and attributed to West Range of Nunnery Quadrangle.

M52. Human head of stucco (see Saville 1921, pl. 5). In Museum of the American Indian, Heye Foundation (New York) and reputedly from vault below floor of Governor's Palace, Uxmal (Gann 1918, pp. 140–141; 1924, p. 246). Described by Saville (1921, pp. 126–127) and by Gann (1918, pp. 140–141; 1924, p. 246).

M53. Human head of stucco (see Saville 1921, pl. 6). For location see M52 above. Described by Saville (1921, p. 127) and by Gann (1918, pp. 140–141; 1924, p. 246).

M54. Grotesque head of stucco (see Saville 1921, pl. 7). In Museum of the American Indian, Heye Foundation (New York) and reputedly from vault below floor of Governor's Palace, Uxmal (ibid., p. 127). Briefly described by Saville (ibid.).

M55. Human figure of stone (fig. 467a) .57 m high, .37 m wide. In Museum of Archeology, Merida, Yucatan. Figure seated in Buddha fashion may have worn face mask. Tenon at rear of figure. Museum description reads: "Human figure seated in oriental style. Height .77 m, width at the knees .38 m, thickness .55 m including the

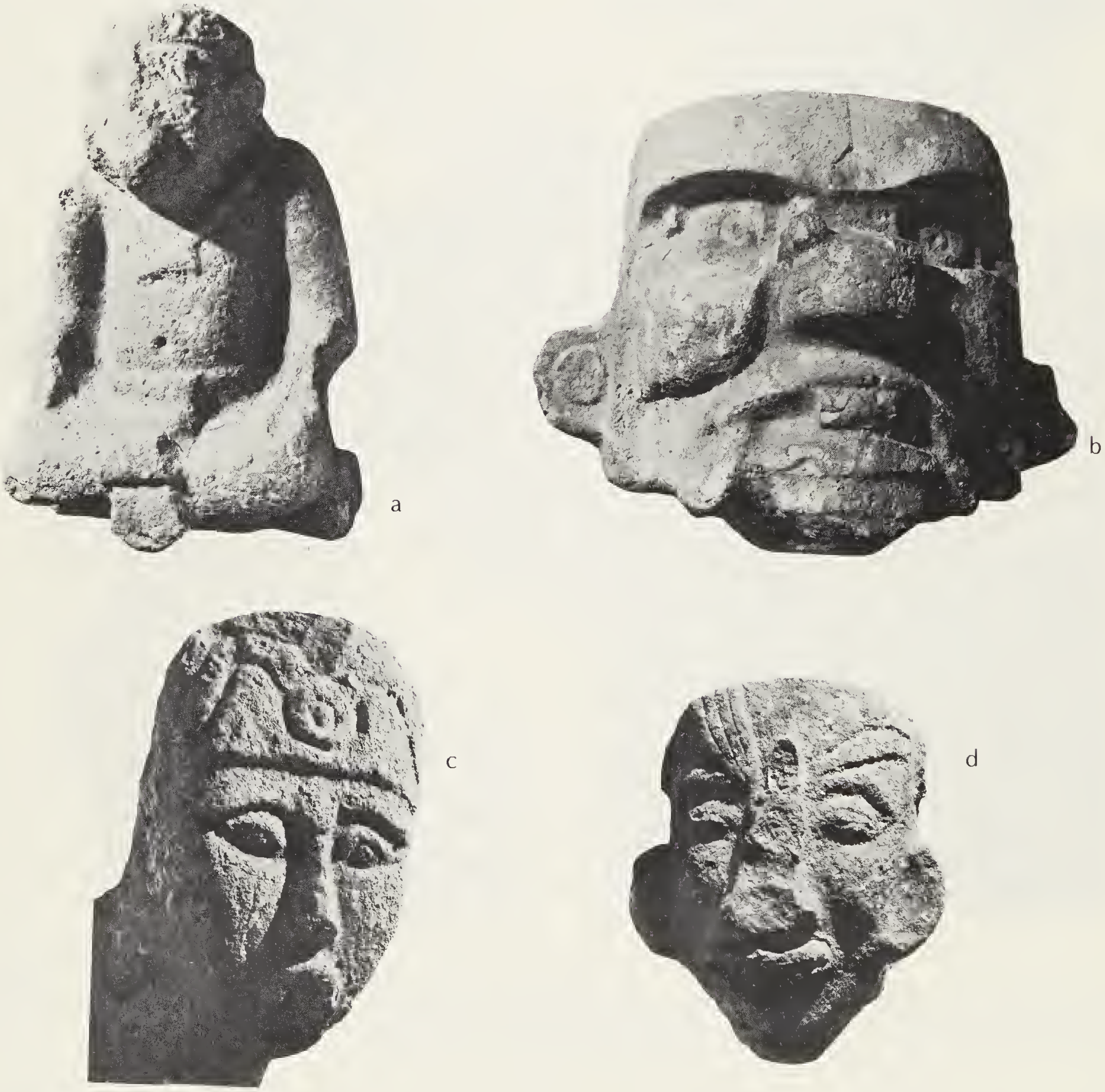


Figure 467. Uxmal. Miscellaneous sculpture: a, M55, human figure of stone; b, M56, grotesque head of stone; c, M57, human head of stone; d, M58, human head of stone.

tenon. Provenience: Uxmal." I do not know which measurement of height is correct, mine or that on the label.

M56. Grotesque head of stone (fig. 467b) .34 m high, .45 m wide. In Museum of Archeology, Merida, Yucatan.

Bulbous nose pierced by nose plugs, ears carry ear plugs, long curving fangs hang from corners of mouth. Tenon at rear of head. Museum description reads: "Masked head of the god Chac. Height .37 m, width .48 m, thickness .56 m to the tenon. Provenience: Uxmal."

M57. Human head of stone (fig. 467c) .28 m high, .19 m wide. In Museum of Archeology, Merida, Yucatan.

Flat face, rather low relief. Somewhat feminine. Tenon at rear of head. Museum description reads: "Human mask with frontal headdress. Height .28 m, width .18 m, thickness .22 m with the tenon. Provenience: Uxmal."

M58. Human head of stone (fig. 467d) .27 m high, .25 m wide. In Museum of Archeology, Merida, Yucatan.

Simple headdress. Nose broken but probably heavy. Ear plugs. Tenon at rear of head. Museum description reads: "Human mask without attributes, lock of hair in front. Nose mutilated. Height .28 m, width .23 m, maximum thickness .24 m with the tenon. Provenience: Uxmal."

M59. Colonnette of stone (fig. 468) .50 m high, .20 m in diameter. In Museum of Archaeology, Merida, Yucatan.

Low-relief carving covers three-quarters of the circumference of the colonnette. Museum description reads: "Little cylinder of stone decorated with a bas-relief representing three personages probably gods of the Maya Pantheon. Two look toward the left and one toward the right. Each one of them carries on its head the 'Maize Symbol.' Those on the ends are on a figure very similar to 'Cipactli' of the Mexican calendar. The one in the center seems to be on an object like a throne with a head at each end. It is said to come from Uxmal. Height .55 m, diameter .185 m."

M60. Animal head of stone (fig. 469a) .30 m high, .58 m long. In Museum of Archaeology, Merida, Yucatan.

Head carries crest. There is no lower jaw. Museum description reads: "Head of American 'Jabali' (Tayusso Angulatum Yucatanensis), or peccary, that had been classified as a crested serpent. It is said to come from Uxmal. Length .595 m, height .31 m, width .22 m."

M61. Human torso of stone (fig. 469b) .38 m high, .33 m wide at top, .37 m thick. In Museum of Archaeology, Merida, Yucatan.

Very similar to M25 and M26 (see above). Small head hanging upside-down at belt (?). Museum description reads: "Torso from Uxmal. The face that appears inverted on the chest hangs from the shoulders fastened by cords. Height .38 m, width at top .33 m, maximum thickness .37 m."

M62. Human head of stone (fig. 469c) .42 m high, .32 m wide. In Museum of Archaeology, Merida, Yucatan.

Face exhibits very low brow ridges and looks almost infantile. Museum description reads: "Head from Uxmal, probably from the 'House of the Governor.' Height .42 m, width .36 m, nose to occiput .28 m."

M63. Human head of stucco (fig. 469d) .34 m high, .35 wide. In Museum of Archaeology, Merida, Yucatan.

Face of old man with ear plugs. Museum description

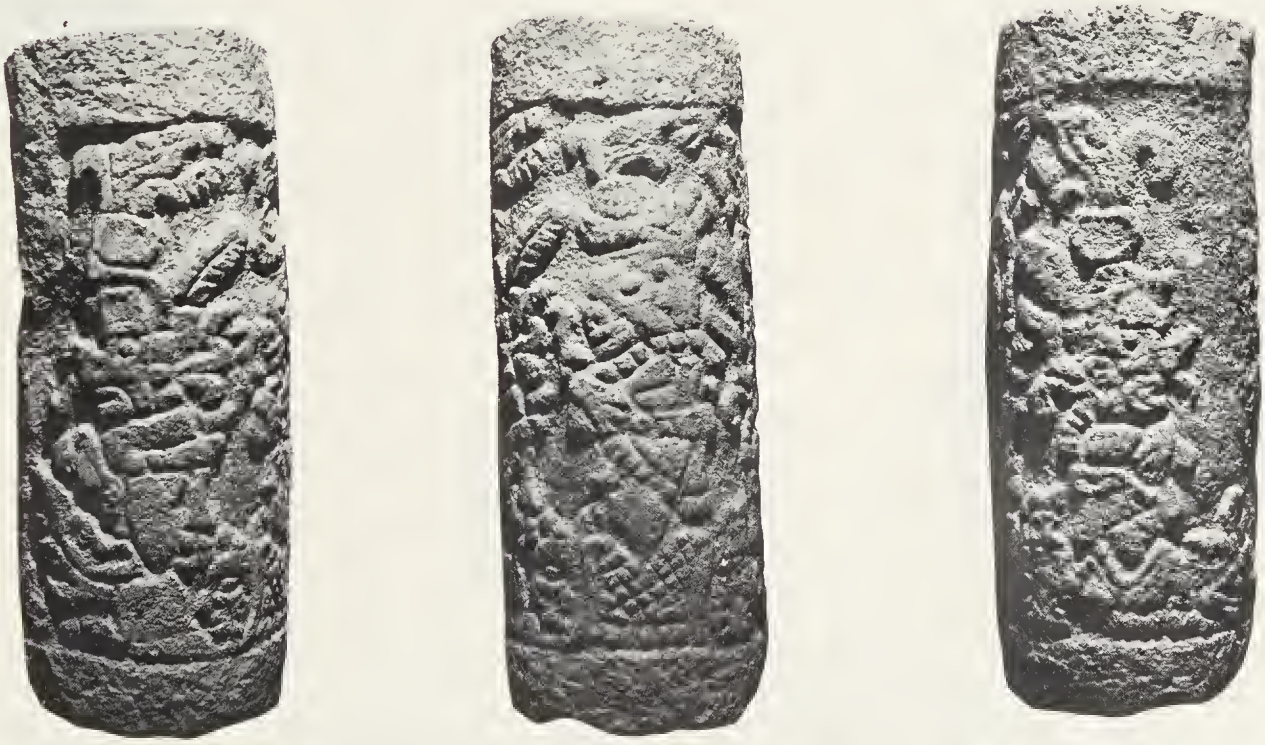


Figure 468. Uxmal. Miscellaneous sculpture, M59, colonnette of stone with bas-relief covering three-quarters of circumference.

reads: "This head, if in fact it is authentic, is notable for the manner in which it is made. One may notice that what is probably the face forms a separate mask, added to the rest of the piece. The material is so light that it appears to be a cast made from some mortar. It is said to come from Uxmal. Height .345 m, ear to ear .34 m, nose to occiput .25 m."

M64. Human head and reptilian jaw of stone (fig. 469e) .61 m high, .30 m wide, .365 m thick. In Museum of Archaeology, Merida, Yucatan.

Represents familiar motif of human face in serpent's mouth. Museum description reads: "Human head issuing from gullet of a reptile, probably crocodile, of which only the upper maxillary exists. Uxmal. Note the mutilated teeth and the transverse rugosities of the palate. Length .61 m, maximum width .30 m, height .365 m."

M65. Stone gargoyle (fig. 469f) .89 m high, .32 m wide, face .26 m high. In Museum of Archaeology, Merida, Yucatan.

Waterspout in shape of human figure, with canal in back and mouth forming spout. Museum description reads: "Gargoyle, the style of which casts doubt that one is dealing with a Maya sculpture, although its original document says that it comes from the ruins of Uxmal. Height .89 m, from elbow to elbow .32 m, from chin to the top of the head .26 m."

M66–72. There are seven sculptures in the Merida Museum that closely resemble pieces illustrated by Seler (1917) as being from the Nunnery Quadrangle. I think there is every chance the museum specimens do indeed come from the Nunnery, but I nevertheless list them here as miscellaneous sculpture (M66–72) to provide a record of them and because there must remain some uncertainty as to their origin.

M66. Standing human figure of stone (see Seler 1917, fig. 54, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

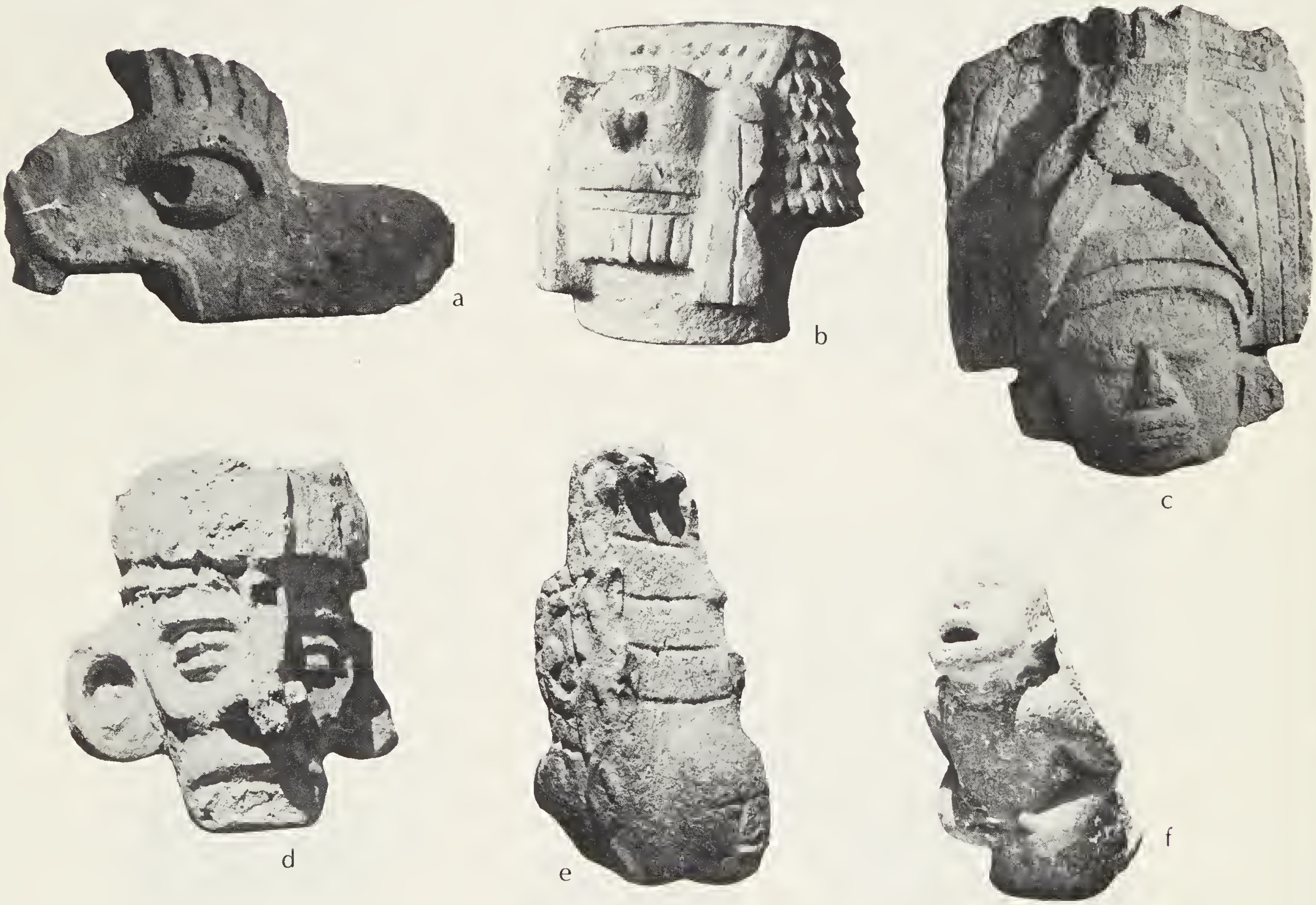


Figure 469. Uxmal. Miscellaneous sculpture: a, M60, animal head of stone; b, M61, human torso of stone; c, M62, human head of stone; d, M63, human head of stucco; e, M64, human head and reptilian jaw of stone; f, M65, stone gargoyle.

Museum description reads: "Human figure of stone; mutilated. Height 1.24 m, width .45 m, maximum thickness .80 m. In 3 pieces. Uxmal."

There is a tenon at the back of the sculpture. My notes refer to the figure as an "archer," mentioning arrows over the left shoulder. Seler (ibid.) suggests the piece he illustrates represents a flute player. The figure in the museum wears a loin cloth.

M67. Standing human figure of stone (see Seler 1917, fig. 47a, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Human figure. Mutilated; divided in 3 pieces. Naked, miniature personage. Height 1.05 m, width .40 m, thickness .30 m. Uxmal."

The figure seems to be that of a slave or prisoner. There is a rope about the neck, the wrists are tied, and the arms may be bound to the sides. The male genitals are portrayed.

M68. Standing human figure of stone (see Seler 1917, fig. 47b, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Human figure of stone. Decapitated, naked, pierced penis. Height 1.04 m, width .44 m, thickness to the tenon .45 m. Uxmal."

There is a tenon at the back of the sculpture. My notes refer to the figure as an "archer" with arrows over the right shoulder. Seler (ibid.) calls the piece he illustrates a "prisoner." The male genitals are portrayed and the penis is pierced laterally by two rods.

M69. Stone figure of bird (see Seler 1917, fig. 55, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Stone figure of bird. Two pieces. Height .70 m, width .42 m, length from the head to the tenon .66 m, length of the body including the tenon .52 m. Uxmal."

Body and head of figure are separate pieces with tenon at back of each piece. Seler (ibid.) says the piece he illustrates has a human head.

M70. Seated human figure of stone (see Seler 1917, fig. 52, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Squatting human figure. Hands tied at the chest. Broken and repaired. Height .92 m, width .35 m at the knees, .33 m at the shoulders, thickness .50 m at the tenon. Uxmal."

Figure consists of three pieces: head, torso, buttocks and legs. There is a tenon at the rear of the torso. Some question whether figure is properly restored. Sculpture, which portrays slave or prisoner, shows rope about neck, wrists tied, and arms seemingly bound to sides. Male genitals broken off.

M71. Standing human figure of stone (see Seler 1917, fig. 47a, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Decapitated human torso. Hands tied at the chest. Height .42 m, width .40 m at the elbows, thickness .85 m including the tenon. Uxmal." Similar to M67 (see above).

M72. Human (?) figure of stone (see Seler 1917, fig. 33a, for similar sculpture). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Broken torso emerging from a radiant disc. Palace of the Governor, Uxmal. Height .46 m, maximum width .52 m, thickness including the tenon .35 m."

Torso of what probably is a human figure is surrounded by rays. In spite of the provenience given by the Museum, the piece is sufficiently like that illustrated by Seler (ibid.) to suggest it comes from the Nunnery.

M73–75. There are three specimens in the Merida Museum, listed as coming from Uxmal, of which I have brief descriptions but no illustrations.

M73. Stone body of bird (cf. Kabah, M3, fig. 377a, b). In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Monolith representing the body of a bird whose head was not natural. Uxmal. Height .34 m, from wing to wing .56 m, from breast to the tenon .38 m." Sculpture portrays body and wings of bird with socket to accommodate separate head, now missing. Tenon at back of body.

M74. Two-headed jaguar of stone (cf. M21, above). In Museum of Archaeology, Merida, Yucatan.

Seems to be like M21 but very badly weathered. May have been cruder than other sculpture. Provenience is listed as Uxmal.

M75. Stone incense burner .28 m high, .30 m wide. In Museum of Archaeology, Merida, Yucatan.

Incense burner portraying face of god Tlaloc. Circled eyes and comblike teeth. Specimen is of type found in quantity at Chichen Itza (e.g., see Ruppert 1935, figs. 174–176, 178–179). Provenience is listed as Uxmal but could be an error.

MONUMENTS

STELAE

Stelae 1–16. Of the 17 stelae known from Uxmal 16 are located on the Terrace of the Monuments or Stelae Platform (see figs. 388, 389). They are described and illustrated by Morley (1970).

Stela 17. Carved (fig. 470; and see Blom 1930, p. 208). I have no measurements of this monument. It is located at bottom center of great stairway leading up to North Range of Nunnery Quadrangle (see Marquina 1951, photo 378).

Stela found broken and scattered by Blom (1930, p. 203; 1934, p. 58) who repaired the monument and called it Stela 20. As there are only 16 other known stelae

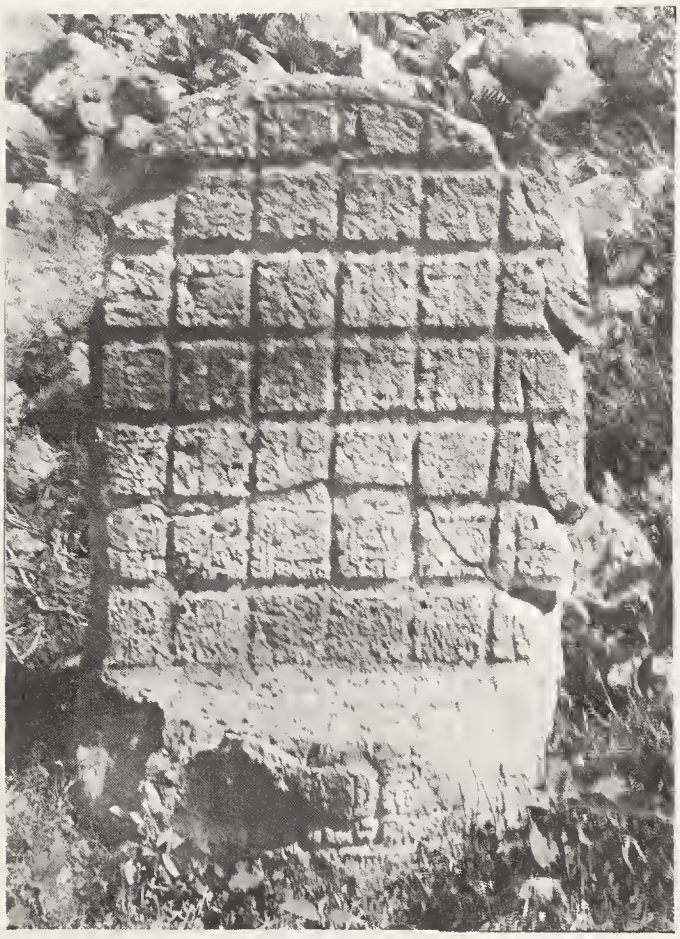


Figure 470. Uxmal. Stela 17, front.

from Uxmal, I am changing the designation to Stela 17.

I have no notes on this monument, and I know of no adequate description. Blom (ibid.) notes that it "has hieroglyphic inscriptions on all four sides" and that "it is badly weathered and damaged, but many glyphs can be recognized." An entry in Morley's 1941 diary, in the Peabody Museum of Harvard University, concerning this stela runs, "I feel sure I make out the day 12 Ahau perhaps preceded by a Tun 6 or a Tun 11, the latter not being so certain."

ALTARS

My data covering altars at Uxmal are woefully inadequate. I list 40 examples here but there is little question in my mind that many more once graced the site. The great majority of the 26 altars now known were found on the Terrace of the Monuments. The remainder were located in courts and often were associated with low rectangular platforms.

Seven of the altars on which I have data carry some form of carving. I cannot give the proportion of column altars to drum altars, because of lack of information, but it is my guess that the column variety exceeds the drum variety, as is true at other Puuc sites.

Altars a–z. See Morley 1970, pp. 161–162, for such description and measurements as we have for these monuments. All are located on the Terrace of the Monuments.

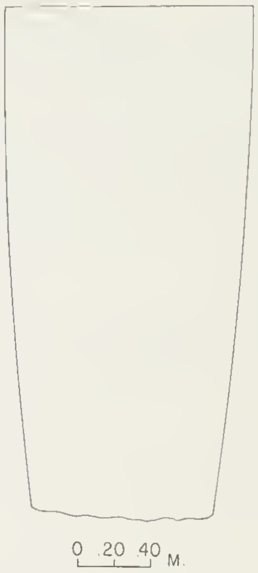


Figure 471. Uxmal. Altar 3, profile.

Altar z. This is listed by Morley (ibid.) as Miscellaneous Sculptured Stone II. It is clearly a drum altar, as shown by Morley's measurements, and I am therefore changing the designation to that of "altar."

Altar 1. Stephens (1843, 1:308) reports an altar of the picote or columnar type at the center of the court of the Nunnery Quadrangle. He likens it to the great picote (Altar 3, below) in front of the Governor's Palace. The monument is no longer in the courtyard and I do not know what has become of it.

Altar 2. Stephens (ibid., p. 312) reports an altar of the picote or columnar variety at the center of the courtyard between the House of the Birds and the House of the Magician. It seems no longer to be there and I do not know its whereabouts.

My notes report several altars on the great terrace before the Governor's Palace but describe only two, which are listed below. At the center of a photograph published by Ruz (1955a, pl. 22) of the platform where the sculpture of the two-headed jaguar (M21) was found is a stone that appears to be a columnar altar, but with no evidence other than the picture I do not feel justified in listing it as a monument.

Altar 3. Plain (fig. 471; and see Ruz 1955b, pl. 11). Diameter at top 1.38 m, at bottom approx. 1.0 m; height 2.85 m. Set into small rectangular platform on great terrace before Governor's Palace (ibid., p. 10).

Rather crudely finished column altar. Not well rounded and good many irregularities. Top slightly domed. Within my experience unique in size among Puuc altars (e.g., cf. fig. 382). See Stephens 1843, 1:181, for further description.

Altar 4. Carved (fig. 472). Diameter .50 m at top, approx. .40 m at bottom; height .81 m. Found on great terrace before Governor's Palace. Exact location not recorded, but my memory places it a short distance north of

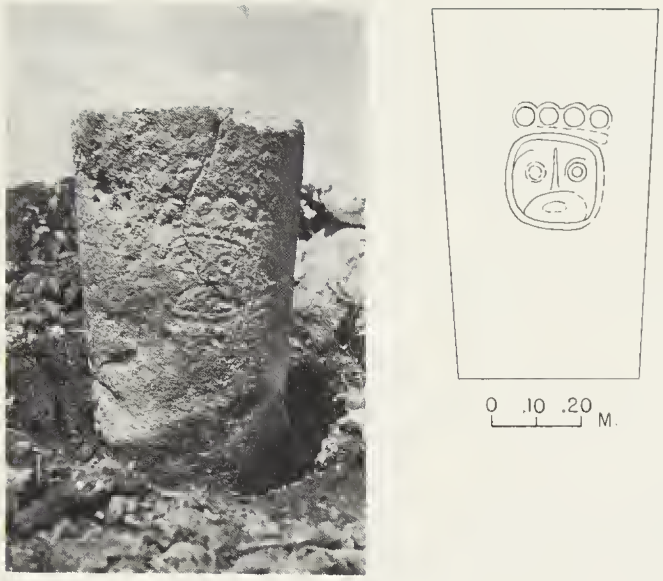


Figure 472. Uxmal. Altar 4.

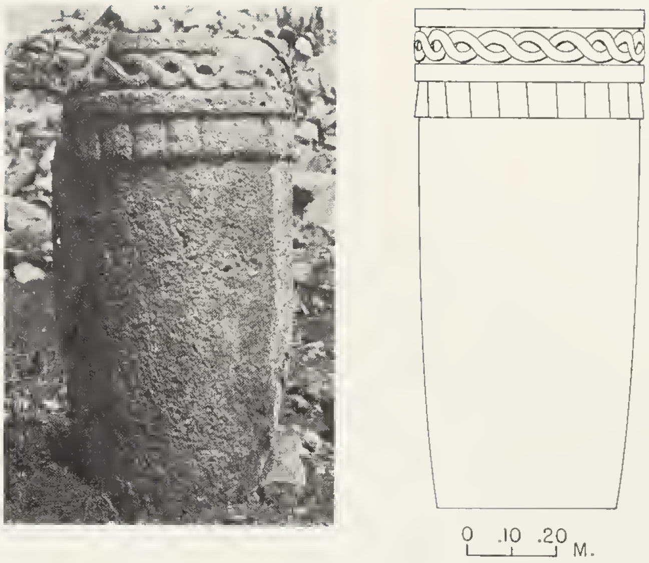


Figure 473. Uxmal. Altar 8.

Altar 3 and of the platform of M21. Column altar finely cut on top, side, and bottom. Carries glyph 4 Ahau carved on side.

Altar 5. Morley (1910, p. 3) reports the "base" of an altar at the foot of the stairway on the south side of the North Quadrangle of the South Group. He says, "It is 2½ feet [.76 m] in diameter and has two intertwined serpents sculptured around its base." Morley seems to have mistaken the top of the altar, where such decoration frequently occurs, for the base. The "intertwined serpents" presumably are the common guillochelike, intertwined bands often seen around the tops of column altars (see Altar 8, below).

Altar 6. Morley (1910, pp. 10–11) reports a column altar on the small rectangular platform at the center of the South Quadrangle of the South Group. He again confuses the top and the bottom, saying, "It is 7½ feet [2.29 m] long, one foot and a half [.46 m] in diameter at its smaller (upper) end, and 2 feet [.61 m] in diameter at the base." The altar was in two pieces and too weathered to tell whether it was carved or not.

Altar 7. Morley (1910, p. 16) reports the fragments of an altar near the ruins of a small platform at the center of the court before the South Temple in the South Group. The fragment had a diameter of one foot and a half [.46 m].

Altar 8. Carved (fig. 473). Diameter at top .51 m, at bottom approx. .40 m; height 1.10 m. Resting before East Building in South Court of Group 17. Well-shaped and finished column altar with design of intertwined bands and "feathers" around upper end.

Altar 9. My notes refer to an altar "identical" to Altar 8 lying before West Building in South Court of Group 17.

Altar 10. Carved (see Holmes 1895–97, pl. 7; Seler 1917, pl. 35:1). Diameter at top .72 m, at bottom .56 m; height 1.42 m.

According to Holmes (1895–97, p. 96), altar was discovered by E. H. Thompson "half a mile [.8 km] south and a little east of the Governor's Palace." Seler (1917, pp. 153–154) says, "Almost exactly to the south of the Iglesia [i.e., House of the Old Woman], on the east side and not far from the road that runs from Uxmal to Santa Elena, passing by the Casa del Adivino, there is a small complex" in the center of whose court was the altar in question. The monument is now in the Museum of Archaeology in Merida, Yucatan.

Both Holmes (1895–97, p. 96) and Seler (1917, pp. 153–154) give brief descriptions of this well-cut and finished column altar. The description in the museum reads: "Monolithic column broken in several pieces, topped by a band of hieroglyphic inscriptions plus a rectangle also with hieroglyphic inscriptions. Approximate height 1.42 m, diameter .71 m at the top, diameter .51 m at the bottom."

Altar 11. Plain. Diameter .43 m, height .62 m. On low platform in lower (north) court of Chanchimez group. Cylindrical column altar described and located on plan of group by Graham (in prep.).

Altar 12. Plain. Diameter .54 m. Found on surface of court just south of platform supporting Altar 11 (see above). Described and located on plan of group by Graham (in prep.). I do not know whether this is a drum or column altar.

Altars 13, 14. Plain. Diameter of each about .42 m at top and .36 m at bottom; height of each about .50 m. On surface of court south of platform supporting Altar 11 (see above). Typical column altars. Described and located on plan of group by Graham (in prep.).

OTHER SITES

Nohpat
(Nohput)

Four km southeast of Uxmal, about 10 km west of Santa Elena, and 13 or 14 km northwest of Kabah.

Nohpat may be a truly old place-name. It occurs in the Chumayel migration narrative (Roys 1933, p. 73) but in a context that seems to identify it as a different site from the ruins near Uxmal.

Stephens (1843, 1:362–368) mentions several very large structures and says, "The mounds and vestiges of buildings were perhaps as numerous as those of Uxmal, but they were all ruined." He noted a huge altar of the picote variety and a number of sculptures, several of which he describes and illustrates (ibid., pp. 364, 366, 367). A carved representation of skulls and crossed bones is strikingly like the similar designs on the sculptured platforms in the court of the Cemetery Group at Uxmal (see pp. 223–224).

A visitor to Nohpat only a few years after Stephens's journey says that a large clearing showed a multitude of ruins to form a chain for 4 miles (6.44 km) to the southeast of Uxmal, apparently an extension of that site (M.F.P. 1845, pp. 365–366). The writer observed a causeway 4½ varas (3.75 m) wide, made of stone, lime mortar, and sascab, which he says begins at Uxmal and ends at Nohpat to the southeast. Besides the buildings and sculptures seen by Stephens, the writer mentions two enormous heads in the "Egyptian" style measuring one-half vara (.42 m) from top to tip of beard, and a stone phallus 2 feet (.61 m) long and 1 foot (.30 m) in diameter, together with other less well-preserved examples (ibid., p. 367).

Still another early visitor to Nohpat observed four columns with figures of warriors carved on them, a stone sphere 2 varas (1.67 m) in circumference, various mutilated statues, and the previously seen stones with skulls and crossed bones (Anon. 1845a, p. 262). The unknown visitor writes of a causeway that runs from Uxmal to Kabah, passing by Nohpat, which was visible at several places and which was followed from Nohpat toward Kabah for more than one-quarter of a league (1 km) (ibid., pp. 267–268). It was, he says, always 4¾ varas (3.97 m) wide, made in the same manner, and ran in a straight line.

Charnay (1887b, pp. 274, 276) tells of being offered a statue in Ticul that reputedly came from Nohpat. His illustration shows a fat-faced human figure somewhat similar to a type seen elsewhere in Yucatan (e.g., see fig. 627; and Proskouriakoff 1950, fig. 97a). Charnay notes that the figure had a tenon at the back and surmises it came from the facade of a building.

I made a brief visit to Nohpat in 1936. The account in my diary is given below without change except for explanatory material enclosed in square brackets:

> To Nohpat today, the ruins being just 3 miles (4.83 km) away [i.e., from Hacienda Uxmal] and pretty well due south, slightly east I guess [actually considerably east]. Trip took nearly an hour in the car going, due to opening road, but returned in about 35 minutes. Good road but overgrown.
>
> Had sent the laborers over several weeks ago to open road, explore, and trace the sacbe [causeway] to Uxmal if they could. They reported the ruins terribly fallen, hardly a vault standing, but Pablo, who went with them, stumbled onto an altar with hieroglyphs. Last night Eugenio showed me a drawing he had made of the glyphs and as this plainly showed numerical coefficients, it seemed worth a photograph. Also was interested in the sacbe.
>
> In regard to the sacbe, the boys traced it to within about 1 km of Uxmal where they lost it in an *akalche* [swampy area]. There seems to be no doubt, however, that it reaches Uxmal and appears to be making for the general vicinity of the Vieja [House of the Old Woman], Nameless Mound [Great Pyramid], or Governor's. I first saw it today where our road crossed it just 2.6 miles (4.18 km) from here [Hacienda Uxmal] and 0.4 mile (.64 km) north of Nohpat. At Nohpat it runs just west of, and at the foot of, the Great Mound. South of Nohpat there is a huge new milpa [cleared field] where the sacbe is perfectly plain for a stretch of about ¾ of a kilometer, continuing on to the southeast at the far edge of the milpa.
>
> The sacbe is 4 m wide, is nowhere higher than the single course of stones that line the sides, and is made of a fill, or really [a] surface, of small rough stone between the larger rough stones (.30–.40 m) that form the sides. It is to be supposed that this gravellike (it actually appears more like crushed rock) surface was finished off like the usual Maya flooring [fig. 474], but no sign of this remains and we may not be sure. The road makes no effort to follow contours or to avoid hills, going up and down some very steep slopes, but at the same time by no means follows a straight line, as has more or less been taken for granted of sacbeob [causeways]. In its course across the milpa, a stretch I take to be about 700–800 m, I have the following sights, running from south to north, the first two sights probably being 200 m each, the last three somewhat shorter:—316°, 322°30′, 322°30′, 318°, 306°30′. North of Nohpat (0.4 mile; i.e., .64 km) the course was 300°, all of these figures Magnetic [i.e., compass readings].
>
> Near the middle of the milpa was a great, crude, unworked, eccentrically shaped slab, set up erect in the center of the sacbe. Wherever the road crosses a stretch of kancab [red soil of bottom lands] it disappears and in woods it is almost invisible even on rocky ground. There is every reason to believe that this is the sacbe that leaves Kabah in a northwesterly direction [see p. 155].
>
> The ruins of Nohpat are indeed completely fallen. I saw only one vault that gave any good idea of construction, which was normal Puuc. Some fallen mask fragments were very finely cut and reminiscent of the North Ridge Building [Str. 1A1] at Kabah. Vault and mask elements are about 0.5 km west of the Great Mound.
>
> The Great Mound is in a way an acropolis in that there is a court at the top. It seems to face south. On the south slope is a great stela (not the Stephens's stela) face down and head to south. It has a rounded top but on the whole is not particularly well worked. The only sculpture is an oval depression, .04–.05 m deep, as shown in the sketch [fig. 475a]. The stone is .35 m thick. The skeleton stela at Kiuic has a circular depression where the face should be [see p. 362], I suppose to aid in attaching a

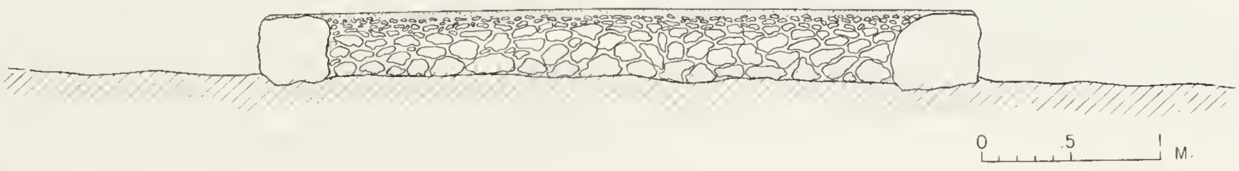


Figure 474. Nohpat. Restored section through causeway.

stucco face. This oval depression [i.e., in the Nohpat stela] may have served the same purpose, the body being painted or in low-relief stucco.

The glyphic altar is in the upper court [i.e., of the Great Mound] at the south foot of the north and highest mound. As seen from the sketch [fig. 475b], it is typically Puuc in form. The width of the glyph panel is measured on the curve. The upper glyph clearly carries a coefficient of 9. The lower one has three dots, the middle dot being larger than the upper, the lowest dot, which is half gone, apparently having been the same size as the middle. I take the coefficient to be 3, although a space filler is possible. Although the upper edge of the altar is cracked away, nothing is lost of the glyphs. The stone was face up and the glyphs are pretty eroded but by no means gone. Incidentally there are plenty of plain altars lying around as in all Puuc ruins.

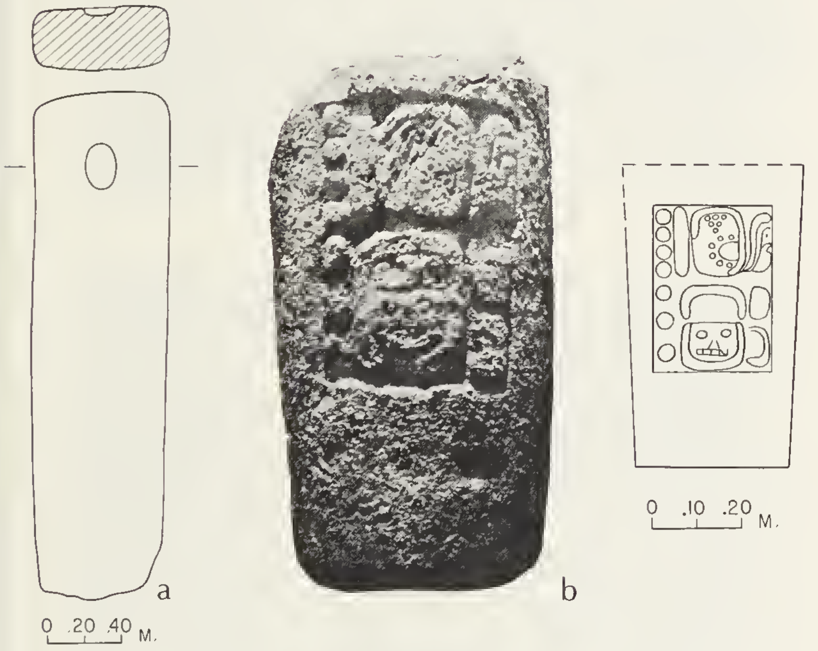


Figure 475. Nohpat. Monuments: a, stela; b, altar.

From the top of the Great Mound, Uxmal is plainly visible and looks very close. Magnetic angles follow:—to Palomas pyramid [South Temple] 297°, to Nameless Mound [Great Pyramid] 298°30′, to Adivino [House of the Magician] 305°.

Not much else on Nohpat. A number of little, low-walled structures usually found with chultun platforms [see p. 79], in this instance with little columns of a single drum about 1 m high by .35 m diameter. Plenty of chultuns. Besides regular spool facade decoration, note the following:—[sketch of spool in shape of apothecary's mortar but with raised bands where top and bottom join body]. Guess this is about all.

On a loose slip of paper between the pages of my diary is a sketch of the inscription on the Glyphic Altar that is almost identical to the drawing in figure 475b. Written beneath the sketch, in handwriting that I take to be that of J. E. S. Thompson's, but am not certain, is "Tun 9 – 3 Ahau. 10.1.9.0.0?"

REFERENCES

Stephens 1843, 1:362–368.
M.F.P. 1845.
Anon. 1845a.

Sacbe

(Sacbey, Sachey, X-haxche)

Approximately 10 km southeast of Uxmal, 6 km southeast of Nohpat, and 8 or 9 km north-northwest of Kabah, as shown on the Tulane University (1940, sect. 2) map. The true location of the site is probably somewhat west of that shown on the map and about on a line between Kabah and Nohpat.

Stephens (1843, 2:122) describes the ruins as consisting of three buildings, but mentions passing other buildings shortly before reaching the site. The structure he illustrates, for which there is also a Maler photograph (Case 1911, p. 112; Totten 1926, pl. 64:4), carries a sloping upper facade zone decorated with masks and frets (see Hissink 1934, pp. 47–48). Another building nearby he describes as having three rooms, the center one entered by a doorway with two columns.

Just beyond this group of buildings Stephens (1843, 2:122) encountered "a broken platform or roadway of stone, about eight feet (2.44 m) wide and eight or ten inches (.20–.25 m) high, crossing the road, and running off into the woods on both sides." It was this causeway, or sacbe, that of course gave the name to the ruins. The natives all agreed that the ancient road ran from Kabah to Uxmal.

REFERENCES

Stephens 1843, 2:122–123.
Hissink 1934, pp. 47–48.

Huntul-chac

This site is not shown on the Tulane University (1940) map. Erosa (1947, p. 7) refers to the ruins, along with Nohpat, as being connected to Uxmal and Kabah by causeway. I know of no other reference to the site.

Mul-Chic

The directions given by Piña Chán (1963a, p. 152) place the ruins about 2 km west of Santa Elena Nohcacab, 11 or 12 km southeast of Uxmal, and 9 or 10 km north of Kabah.

A small site consisting of a single group of mostly destroyed buildings around a courtyard. Excavation has revealed two periods of construction, the first represented by roughly cut wall stone, a column faced with wall stone, slab vaulting, and a heavily stuccoed flying facade of rough stone. The second period is typically Puuc. Buildings of the second period include a small pyramid temple and an example of a two-column doorway.

The ruins are known primarily for some relatively well-preserved wall paintings in one of the early buildings.

REFERENCES

Piña Chán 1962.
Piña Chán 1963a, pp. 134–135.
Piña Chán 1963b.
Piña Chán 1964.
Anon. 1964.
Kubler 1967, pp. 57–59.

Santa Elena
(Nohcacab, Nocacab, Nohcab)

Town on Merida-Campeche highway 13 km east-southeast of Uxmal and 9 or 10 km north of Kabah.

In 1842 there were "numerous and large mounds" in the suburbs and other mounds in the village itself. Even at that time the structures were badly fallen. A sculptured head, recently dug up, was in the wall of a house.

REFERENCE

Stephens 1843, 1:347.

Kuxnecan

Shown on Tulane University (1940, sect. 2) map 4 km east-southeast of Santa Elena. I have no information on the site, nor do I know of any reference to it in the literature.

Xocneceh

Town on railroad about 8 km southeast of Ticul. Xocneceh seems to be a truly ancient place-name, as it is found in the Chumayel migration narrative (Roys 1933, p. 72). I passed through Xocneceh in 1936 and remember some sizable mounds near the village. I do not know of any description of the ruins.

Yiba

Approximately 5 km south-southwest of Uxmal. The pond of Yiba, which is the same place as the ruins, is referred to in a document of 1588 (Roys 1943, p. 190) and thus appears to be a place name that goes back to pre-Conquest times. I have no information on the ruins.

Pozo Cibiche

Shown on Tulane University (1940, sect. 2) map 8 or 9 km south-southwest of Uxmal. I have no information on the site.

Xcoch
(Xkoch)

Approximately 10 km east of Uxmal and 12 or 13 km west of Ticul. Stephens (1843, 1:349–350) describes and illustrates a high pyramidal mound on which only fragments of the summit building and traces of steps remained. He also mentions the remains of several other buildings, all completely in ruin. An extensive system of caverns leads to a permanent water supply far below the surface.

REFERENCE

Stephens 1843, 1:348–358.

Ticul

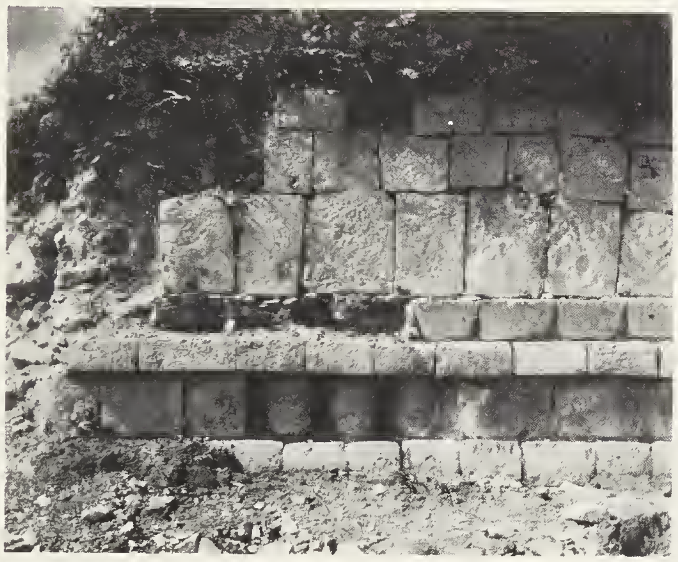
Large town on railroad at junction of two lines from Merida which continue as single line to Peto.

Ticul is an ancient town in the old province of Mani, or Tutul Xiu, as shown by references to it in several early documents (Roys 1933, p. 73; 1943, appendix; 1957, p. 70). There is some question, however, whether there ever was a pre-Columbian city of any size or extent on the site of the present town (Roys 1952, pp. 152–153; 1957, p. 70). The only ruins now visible are several kilometers north of town on the lands of the hacienda of San Francisco (Stephens 1843, 1:272–285), by which name the site is usually known (but see Norman 1843, p. 146). Lying on the plain, at some little distance from the Puuc hills, San Francisco is outside the scope of this book.

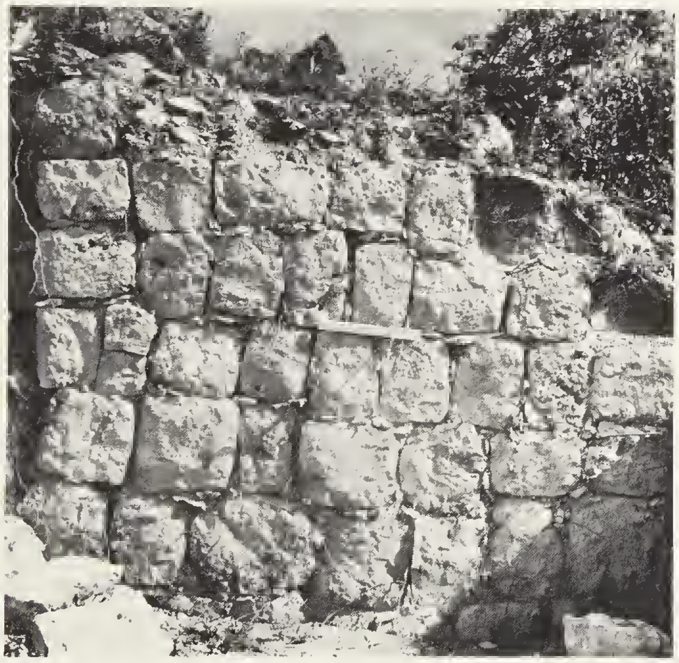
Tzemezakal
(Tzimezakal, Senuisacal)

Tulane University (1940, sect. 2) map places this ruin, under the name of Senuisacal, some 7 km west and slightly north of Uxmal. Roys (1943, map 4; 1957, maps 2 and 7) maps of the ancient provinces locate the site considerably further north. As the ruins were seen by Stephens (1843, 1:188) from the Uxmal-Becal road, I believe the location given by the Tulane map is more nearly correct.

The pond of Tzimezakal, which presumably marks the site of the ruins, is an ancient place-name (Roys 1943, pp. 180, 187; 1957, p. 18). I am indebted to the late Ralph Roys (personal communication) for calling my attention to the ruin of Senuisacal being the ancient Tzimezakal. I know of no description of the ruins beyond Stephens's (1843, 1:188), "we came to an open savanna, and saw a high mound with ruins on the top, bearing south, about a mile distant. It was called, as the mayoral said, Senuisacal. . . . and the mayoral said that it was entirely in ruins."



a



b

Figure 476. Unnamed site. Partly standing building: a, view of colonnettes in base molding at center of east facade; b, masonry of east inner wall of west room.

Unnamed Site

Stephens (1843, 1:222) reports ruins about 8 km north of Uxmal and 5 or 6 km south of Muna. He observed a high mound that supported two relatively well preserved buildings.

Unnamed Site

A kilometer or two south of Muna, and 12 or 13 km north of Uxmal, on the crest of the sierra and just east of the Muna-Uxmal road. Site consists of a single building which was photographed and measured by the late E. W. Andrews in 1942. Description from his diary follows:

> Found by workers on the road in search of stone. Some excavation done by someone, and a good part of the fallen stone carted off and used for the road.
>
> Much fallen, but enough left to make out plan fairly accurately. Walls never standing [to above?] the vault spring.
>
> Typical Puuc style in art [architecture?] and construction. A single range of 3 rooms, apparently entered by 3 doorways opening on Uxmal side [i.e., south].
>
> Masonry very finely fitted and faced veneer averaging 20 × 20 cm per block, highly odontiform, usually about 17 cm deep [fig. 476a]. The veneer was poorly laid on the walls and has mostly fallen off exposing compact rubble core of plaster and quite large blocks.
>
> Enough remained to make a ground plan, 2 sections, and a larger scale section and elevation of the north wall, the latter two showing each stone measured and drawn to scale.
>
> Only information on doorways is part of a jamb in the north [?] room of normal wall masonry with small stones the same size as inner wall stones. These interior stones are quite a bit cruder, less smoothly faced than the exterior masonry [fig. 476b]. Removed from the building by the road workers was a large stone that probably was a lintel, at least its lintel faces were smoothed, the others left rough. 1.30 long × .32 high × .36 deep [i.e., meters].
>
> Apparent asymmetry may be assembled wrong on the plan. The east wall is *sure* at 3.60. The width of 3.90 at the east wall of the next room is sure. To the west of this point the inner wall may have tapered somewhat instead of continuing straight to make a width of 4 m at the west end.
>
> Decoration: No trace of any except a 4-part basal molding. The medial wall surface seems to have been plain. The upper zone has all fallen and been carted off to the road. No trace of any carved stones that might have belonged to serpent masks or such. In the very center of the basal molding of the north [east?] wall is an inset of 3 round columns [fig. 476a]. . . . The center of the middle column is exactly in the center of the wall, 1.80 from the corners.
>
> The only other fragment of standing wall with veneer intact is in front at the west end. Here also exactly the same distance from the corner is an identical 3-column inset.
>
> The temple stood on a low platform, but any details of it are messed up by the road builders.

Unfortunately, the plan, section, and elevation drawings referred to in the diary have been mislaid and cannot at the present time be found. A sketch plan in the diary shows a building of three rooms in line on an east-west axis, the door to each room in the south wall of the structure which faces 6° east of south, magnetic, or almost exactly true south.

Muna

Tulane University (1940, sect. 2) map shows the railroad town of Muna, 55 or 60 km south of Merida and some 20 km northwest of Ticul, as a ruin site. The only reference I can find to pre-Columbian remains is the speculation by Roys (1952, p. 166) that the San Sebastian chapel rests on an ancient substructure.

Muna is an ancient place-name that appears in several early documents (Roys 1943, pp. 185, 191, 192, maps 5, 6; 1957, p. 68). In Conquest times the town was in the province of Mani, or Tutul Xiu.

3 · Oxkintok and the Northern Sites

Northwest of Uxmal, in the angle between the eastern and western ranges of the Puuc hills, which join near the town of Maxcanu, lies the northern area of the Yucatan Ruins. Surprisingly enough, the archaeological map shows this area to be relatively bare of remains (frontispiece). Indeed, the great site of Oxkintok and a scattering of lesser ruins in the immediate region are all that are known in the area. I suspect that this paucity of remains may reflect a lack of exploration, but that, of course, is conjecture.

The ruins of Oxkintok are in an advanced state of decay and a relatively small amount of architectural information is obtainable without excavation. It is, nevertheless, obvious that we meet here a style of architecture we have not seen before, a style represented by remains that appear to be of an earlier time than those previously examined. Less obvious, but still highly probable, is that the great majority of structures that form the core of the city and determine its essential plan are of the earlier period, whereas buildings in the typical Puuc style are scattered through the center and predominate in the outlying groups. I mention these matters here because they seem to me important to the understanding of Oxkintok in a context of Puuc ruins. Simply in the matter of size, the site ranks as one of the Great Cities, but it is different from, and in many respects not strictly comparable to, the others. It is for this reason that I treat Oxkintok separately rather than including it with the Great Cities.

Oxkintok

ETYMOLOGY

Mercer (1896, p. 45, note 1) gives *ox,* three; *kin,* days; *tok,* flint. Roys (personal communication) confirms three-day-flint, and goes on to say that in the *Book of Chilam Balam ca-kin,* two-day, and *ox-kin,* three-day, seem to be a sort of adjective meaning temporary, something not lasting. *Ox* also is the familiar *ramon* tree or breadnut *(Brosimum alicastrum* Sw.). Variant spelling: Oxkintoc, Oxkintox, Orkintok. Other names: Maxcanu, Satun Sat, Sat-tunsat, Santunsat, Zatunzat, Tzat un Tzat.

SITUATION

Approximately 5 km east-southeast of the town of Maxcanu and 30 km northwest of Uxmal.

TOPOGRAPHY

Site lies in the hills just across the ridge from the northern plain and very near the point where the eastern and western Puuc ranges join. More precisely, the ruins are at the eastern end of the rounded junction of those ranges and extend across the valley floor and up the south and southwest slopes of the inner edge of the curving rim formed by the hills. To the south and southeast there is rolling land of small hills, and to the west at a distance of several kilometers is the main range running south to Campeche.

WATER SUPPLY

No known natural permanent source of water, but many caves in region, notably one a short distance northwest of the site (see Mercer 1896, pp. 45–46), and one or more of these may once have led to underground water table. Small amounts of water provided by drip from roofs of caves, which is caught in stone basins or *pilas* (ibid.). Many chultuns observed, particularly in courts of small groups surrounding central concentration of ruins (see Shook 1940, p. 170). Modern well at abandoned hacienda just west of ruins.

MAPS

Sketch map published by Shook (1940) is republished here (fig. 477) with some additions (ibid., see p. 166 for mapping procedures and reliability of survey). Portion of same map redrawn and published by Brainerd (1958, map 6).

SIZE

Map, which includes the principal concentration of ruins and most of the major structures, covers an area approximately 1.2 km north-south by 1 km east-west. There are a number of remains beyond the borders of the map and some fair-sized groups of buildings at distances of 2 or 3 km that might or might not be considered to be part of Oxkintok. There is a particularly dense concentration of ruins at the center of the site.

CIVIC PLAN

In the alignment of the North Group, the North Plaza, and the South Group we see the same north-south axial plan that is found at Sayil, Kabah, and Uxmal (see pp. 85, 140, 209). The location of a complex of courts, plazas, and attendant structures to the east of that alignment is in some respects similar to the arrangement of the Nunnery Quadrangle, the Great Plaza with the Ball Court, and the Governor's Palace at Uxmal. Quite unlike all other Puuc centers we have described, and more akin to many southern Maya cities, is the compact and orderly arrangement of contiguous courts and plazas at the center of the site. A number of causeways running from outlying groups to the center of the city and connecting one group or complex of buildings with another is a more prominent feature than we have seen elsewhere (see Shook 1940, pp. 166–167). The largest of these artificial roads, about 8 m in width, runs southeastward from the central part of the city (Str. 2B7) to a group of buildings approximately 1 km distant and may continue another kilometer to a large pyramid that was seen but not visited. Some 60 m from the western end of this causeway, and located on it, is a low circular platform that forms the drainage basin for an underground cistern or chultun (fig. 477).

Many relatively small groups of buildings outside the central core of the city exhibit the usual dispersed and scattered pattern typical of Puuc sites. Such groups are often located on small natural elevations. Some of the smaller mounds shown on the map probably represent dwellings, but our mapping was too hurried to deal with more than the more prominent and obvious features, and I believe that a careful survey of the site would reveal many more small structures, a high proportion of them probably house mounds.

See G. F. Andrews 1975, pp. 276–279, for further discussion.

Orientation. I think that our mapping procedures and the advanced state of ruin at the site provide little information on the exact orientation of architectural groups. A bearing that should be relatively accurate and possibly be meaningful is that from the pyramid (Str. 3B6) of the South Group to the pyramid (Str. 1B2) of the North Group, which is 10°30′ east of north. The north-south axis of each of seven buildings where enough standing wall was visible to obtain an accurate bearing varied from 1°30′ to 15° east of north, the average being 9°30′. As has been true in all Puuc sites examined, the north-south axis of any structure seems almost invariably to fall somewhat east of north.

DATES

A lintel in Structure 3C6 records the Initial Series 9.2.?.?.?, a date that has generally been read 9.2.0.0.0 4 Ahau 13 Uo (A.D. 475). See Shook 1940, p. 166, figs. 1 and 6; Morley 1945, p. 16; 1956, pp. 72–74 and pl. 18a.

Proskouriakoff (1950, p. 161) suggests that Stela 20 may carry the date 9.16.0.0.0 (A.D. 751) and Stela 3 the date 10.1.0.0.0 5 Ahau 2 Kayab (A.D. 849). She also discusses (ibid., p. 161) the possibility that Stela 9 may have recorded 9.15.0.0.0 (A.D. 731), 10.1.10.0.0 (A.D. 859), or 10.8.0.0.0 (A.D. 987).

REFERENCES

G. F. Andrews 1975, pp. 276–285.
Ciudad Real 1872, 58:443–444.
Mercer 1896, chap. 6.
Shook 1940.
Stephens 1843, 1:212–220.
J. E. S. Thompson 1945, pp. 4–8.

NORTH GROUP

(Structures 1B1, 2)

Good-sized pyramid temple, surrounded by courts and lesser structures, located at foot of slope that rises to crest of main Puuc range north of site. Group rests on hillside at higher level than rest of city, which it overlooks, and directly faces South Group (see fig. 477), the two forming the ends of the principal north-south axis along which the site was planned (see Civic Plan, above). The main approach is clearly from the south where a broad stairway built of rough block masonry leads up to the court in front of the pyramid and a causeway, 2 m wide and a single course of stone in height, connects the group with the North Plaza.

Group is carefully and formally laid out on a series of hillside terraces, of which the uppermost supports the centrally located pyramid temple. All the buildings are badly fallen but a number were unquestionably vaulted. At the northwest corner of the group, just north of Structure 1B1 and northwest of Structure 1B2 are little courtyards formed by low mounds that probably were dwellings or associated domestic buildings. Numerous stone basins, or pilas, are scattered about these courts, and a large depression at the west probably marks the site of a chultun, now caved in.

Several monuments and one piece of sculpture are found in the North Group. Altar 1 (see Monuments, below) is in the small court just north of Structure 1B1. Stela 4 with Altar 2 in front of it (see Monuments, below) rests at the foot of the stairway to Structure 1B2 (fig. 481). Sculpture M1 (see Miscellaneous Sculpture, below) lies near the foot of the main stairway to the group and just west of the causeway, and about 10 m further south is Altar 3 (see Monuments, below).

Structure 1B1

Badly fallen three-room building, of which only the north end of the central room exhibits any worthwhile architectural detail.

SUPERSTRUCTURE

Plan. See figure 478.

Sections. See figure 479.

Construction. Walls, which run from .59 to .68 m thick, are built of moderately well shaped and dressed blocks that contain a central core of lime mortar and rubble (fig. 480). This is typical early-period wall construction at Oxkintok and is better illustrated in Structures 3B5 and 3C5, 6 (see figs. 508–516, 525–529). Vaults are of stepped variety, stepping in at ends of vault as well as at sides, and are made of rough, unfinished slabs (figs. 479, 480a; and see figs. 525b, 528, 529).

Upper facade, of which very little remains (fig. 480b), apparently carried heavy apron moldings that framed a battered upper zone (fig. 479b). Projecting stone tenon at end of building suggests that upper facade once carried stucco decoration.

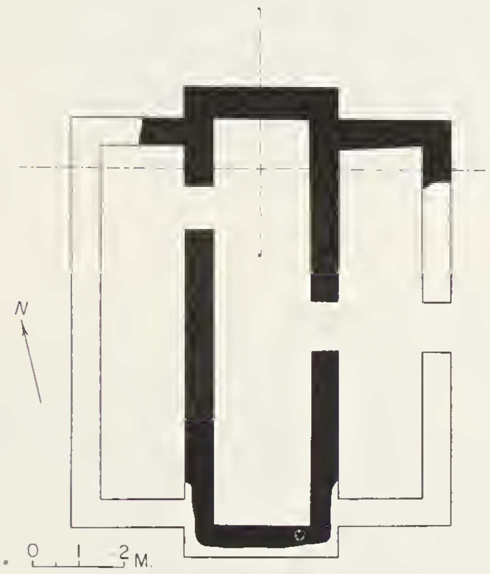


Figure 478. Oxkintok. Plan of Structure 1B1.

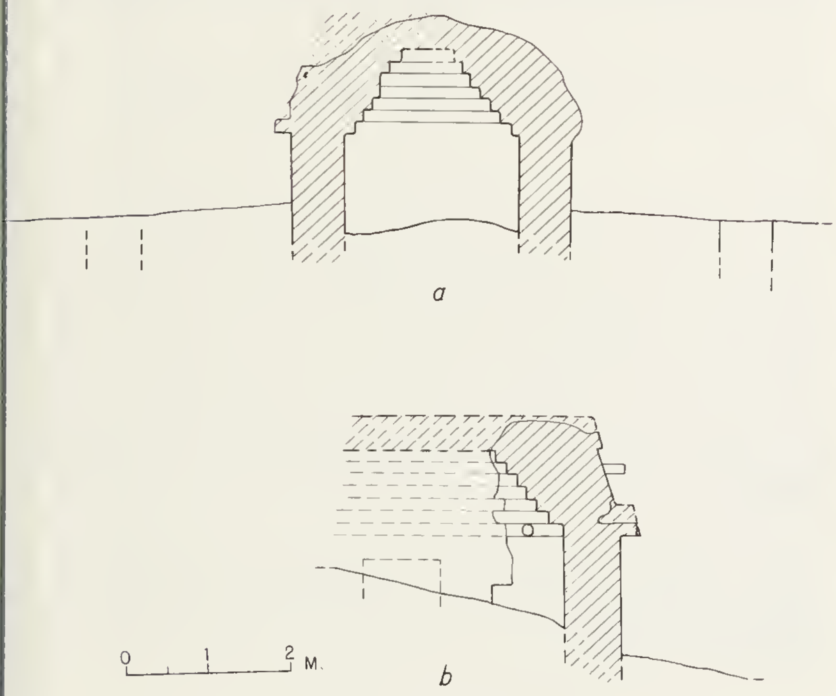


Figure 479. Oxkintok, Structure 1B1: a, transverse section; b, section through north end of central room.

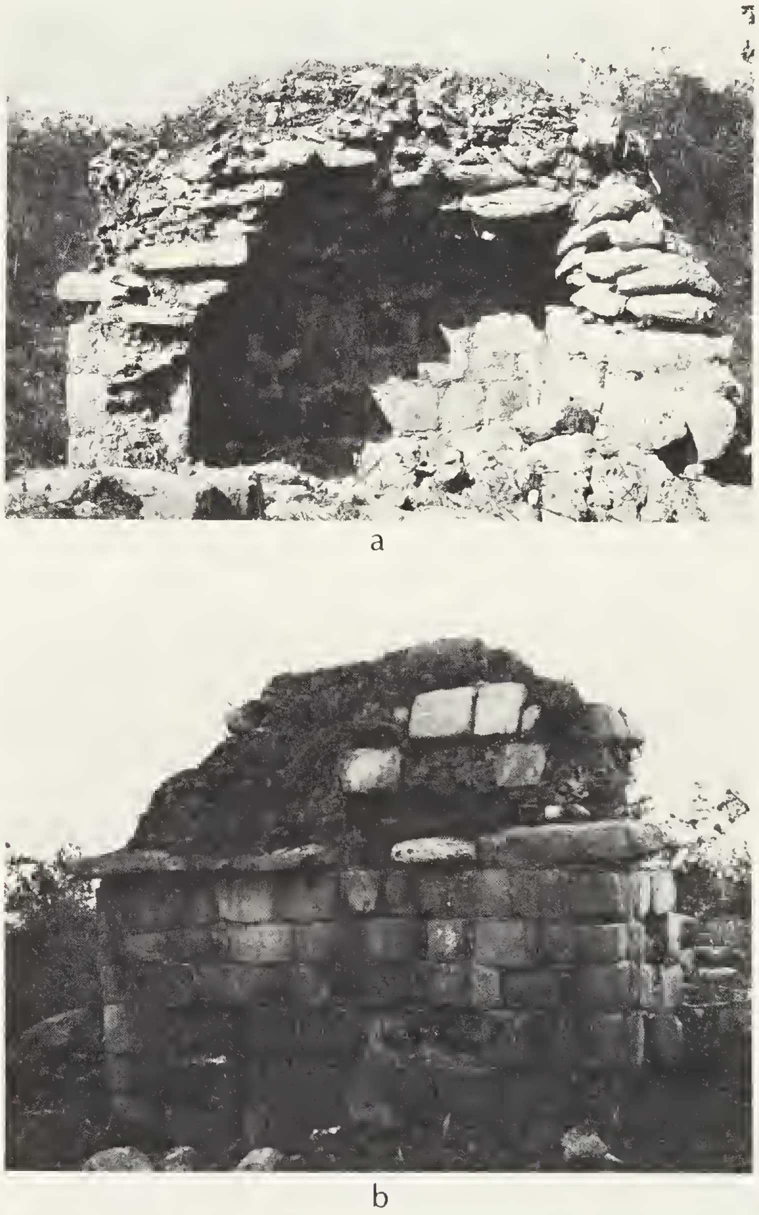


Figure 480. Oxkintok, Structure 1B1: a, central room, looking north, and showing walls and vault in section; b, north end of building, looking south, and showing wall masonry, remains of medial molding, and fragment of upper facade.

Structure 1B2

Badly fallen temple pyramid with stairway on south side, and remains of what probably was vaulted building on summit. At foot of stairway is stela, altar, and low rectangular masonry platform (fig. 481). Stairway, made of large, roughly cut blocks of stone, narrows by successive insets as it rises to the upper platform. Terraces of pyramid are faced with fairly well-cut and shaped block masonry, and walls seem to have carried slight batter. Corners of pyramid are rounded, the front corners (i.e., southeast and southwest) seeming to employ a greater curve than those at rear.

Temple building probably consisted of a front and rear room, whose medial wall and centrally placed doorway are still visible. The building rested on a simple plinthlike platform, .27 m high, and comparable to the base moldings of typical Puuc architecture. The walls, which are .54 m thick, are made of the same block masonry seen in Structure 1B1, and the building seems to be of the early type at Oxkintok.

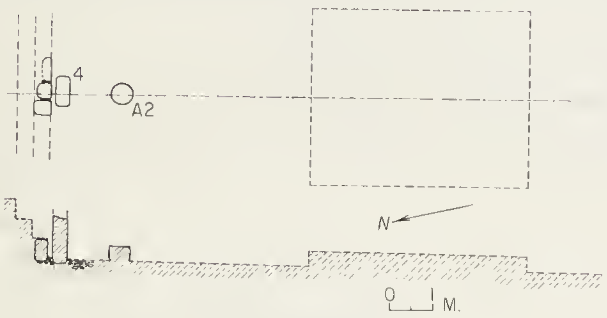


Figure 481. Oxkintok, Structure 1B2. Plan and section showing Stela 4, Altar 2, and low platform at foot of stairway.

Structure 1B3

Large pyramid about 15 m high that supports the remains of an almost totally fallen temple. Structure faces south across North Plaza toward South Group. Terraces of pyramid built of block masonry like that in Structure 1B2, and southeast and southwest corners rounded as on other pyramid. Remains of lower courses of walls of superstructure show masonry like that of Structures 1B1, 2.

Great number of stone drums scattered around platform in front of pyramid. Seem to be too many to have been altars. Possibly were lined up along edge of terrace as sort of parapet (see Str. 2B5, below).

Structure 1C1

Small pyramid with fallen temple building that faced west. Pyramid temple connected with Structure 1B3 by broad causeway that runs almost due east and west. Behind (east) Structure 1C1 is a limestone sink or dry cenote with shallow caves in its east wall. The little masonry of the temple building that was visible was like that of Structures 1B1–3 (see above).

CENTRAL GROUPS

(Structures 2B1–13, 3B1–4, 3C1–8)

The central part of the city consists of an intricate pattern of courts and structures built around two large open spaces that we have called the North and South Plazas (fig. 477). As I have already intimated, the destruction at Oxkintok is appalling, and only an occasional building offers any appreciable amount of architectural information without far more excavation than we were able to undertake.

Stelae 5–26, or all but one that are still at the site, are in the Central Groups, as are Altars 4–27, the great majority of altars (see Monuments, below).

Structures 2B1, 2

Two large and badly fallen structures on the west side of the North Plaza. Terrace walls and debris from stairway are visible on east side of Structure 2B1 (fig. 482), but little shows on summit, and question if masonry superstructure ever existed. These are possibly the largest structures at the site and their importance is shown by the location of Stelae 5 and 6 and Altar 4 in front of Structure 2B1, and of Stela 7 before Structure 2B2 (see Monuments, below).

Structure 2B4

Low structure on east side of North Plaza, completely ruined, seems to have been a platform facing east and once supported some sort of superstructure. Across the front of the stairway on the east side are spaced 1–2 m apart five great rough stones or boulders, each one standing over a meter in height (fig. 483). The monuments, if such they are, are weathered, cracked, and burned from innumerable milpa fires, and if any sculpture existed, it is no longer discernible. The stones are all of about the same size and shape, however, and it is conceivable they were once sculptured—a pot-bellied human figure with arms across the stomach being as good a guess as any as to the subject portrayed.

Just off the northwest corner of this building, and directly across the plaza from Structure 2B2, lies Stela 8 (see Monuments, below).

Structure 2B5 and Adjacent Platforms

Structure 2B5 is a low, tumble-down mound with nothing to distinguish it but a step along the east side, which likely marks the front of the structure. It stands in an area of low

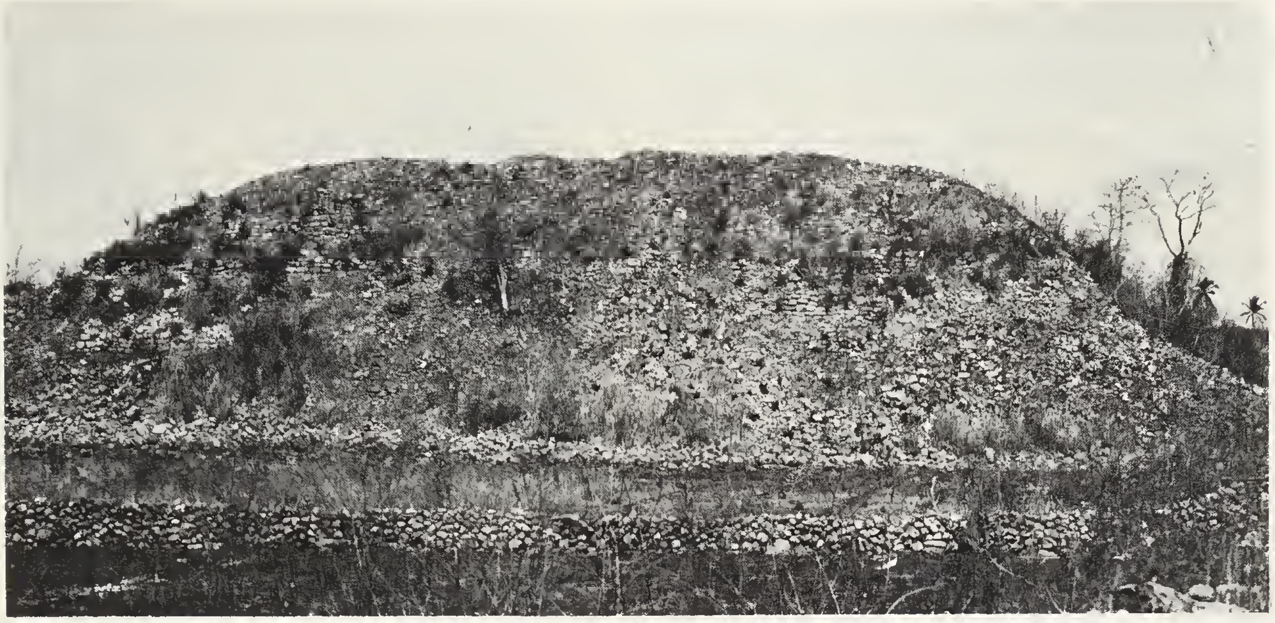


Figure 482. Oxkintok, Structure 2B1, looking west. Modern field wall in foreground.

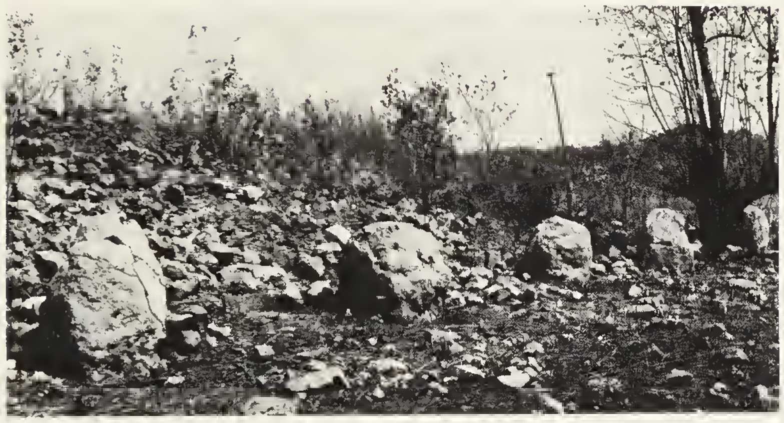


Figure 483. Oxkintok, Structure 2B4. Line of boulders or monuments across foot of stairway, looking northwest.

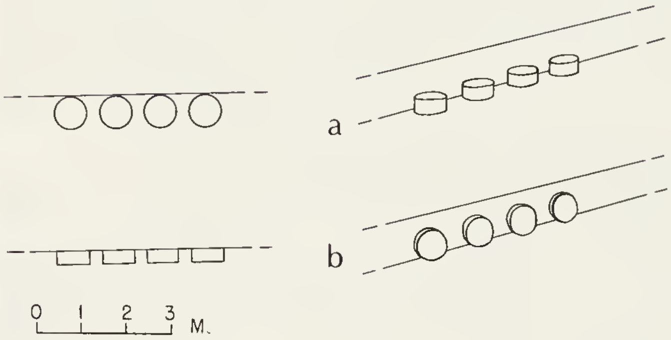


Figure 484. Oxkintok, platform south of Structure 2B5. Plans and perspective sketches of stone drums along sides of platform: a, drums tangent to wall; b, drums set on edge along face of wall.

platforms that are probably the remains of dwellings and ancillary domestic buildings (fig. 477).

Just south of Structure 2B5 is a strange low platform about 1 m high, along whose sides are placed a continuous line of stone drums. At places the drums, which are .65–.75 m in diameter and .30 m thick, lie flat and tangent to the wall of the platform (fig. 484a); at other places they are on edge like so many wheels in a row (fig. 484b). On the east side of the structure, where the drums are tangent to the wall, three similar drums rest several meters out and equally spaced across the front of the platform (fig. 485). There are other similar platforms north of Structure 2B5.

Figure 485. Oxkintok, platform south of Structure 2B5. View of east side, looking northwest, and showing line of stone drums tangent to wall of platform and three other drums in line farther out from platform.

Structure 2B6

Badly fallen building with remains of entrance employing two columns. Vaulting is of crude type, but wall masonry seems to have been of dressed veneer stone of standard

Puuc variety (cf. Xkupaloma, Eastern Building, p. 331). No large jamb stones seen in debris and doorjambs probably built of wall and cornerstones.

Altar 8 was found immediately south of this building and near Structure 2B8.

Structure 2B8

Portal vault with two rooms in line on each side of portal (fig. 477). Fragment of north side of portal vault and of adjoining room and trace of south wall of passage are all that are now visible (fig. 486). Floor of passageway and of rooms seems to have been about 1 m above court level. Passage approached by stone-paved ramp on west and either ramp or 4 or 5 steps at east. Rooms seem to have faced east but small doorway in west wall of standing room. Low circular platform about 5 m in diameter and .30 m high in court at each side of Structure 2B8 and on axis of passageway (figs. 477, 486, 487). Largest causeway at site begins at Structure 2B7 just across court at east of portal vault (see Shook 1940, pp. 166–167).

Altar 7 is standing on the western circular platform, near its eastern edge, and Stelae 9–14, the first of which is deeply buried in later construction (fig. 488), and Altars 9 and 10 are in the eastern court or on Structure 2B7 at the end of the just-mentioned causeway (see Monuments, below). Every indication that the court between Structures 2B7 and 2B8 was of major importance.

SUPERSTRUCTURE

Plan. See figure 489.

Sections. See figures 490, 491.

Base Molding. Apparently none. Walls seem to rise directly from floor outside of rooms.

Walls. Room walls .58 m thick at doorjambs, .80 m thick under portal vault. Outer wall surfaces and those of walls in passageway of Puuc-style masonry of poor to average quality (fig. 492); inner wall faces a mixture of poorly cut block masonry and occasional well-finished Puuc wall stone, all laid with little regard to courses and plentiful use of spalls between stones (fig. 493a).

Doorways. Only remaining jambs of full-width Puuc-style stone. No lintels found and may have been of wood.

Wall Openings and Projections. Windows approximately .15 m square in front and rear walls of room north of portal (figs. 490, 491). Crude cordholders of ring type set in east side and south end of vault of same room.

Vaults. Portal vault has span of 3.75 m (fig. 491). Only small portion of north side standing (fig. 492b). Masonry of average Puuc quality with semispecialized vault stone. Vault of room north of portal a hodgepodge of rough slabs, well-faced Puuc stone, not necessarily vault stone, and many spalls, the whole sloppily laid (fig. 493). Offset at

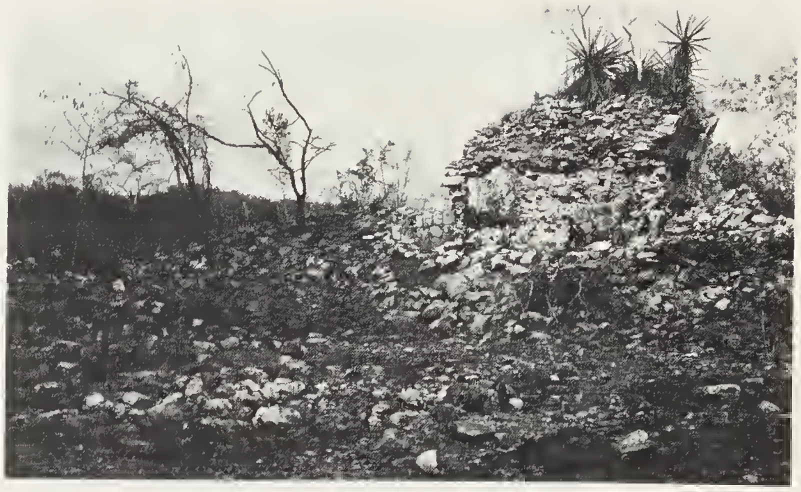


Figure 486. Oxkintok, Structure 2B8. Portal vault, looking east, and showing standing fragment of north side of vault and crumbling west wall of adjacent room. Note remains of low circular platform (see fig. 487) in left foreground.

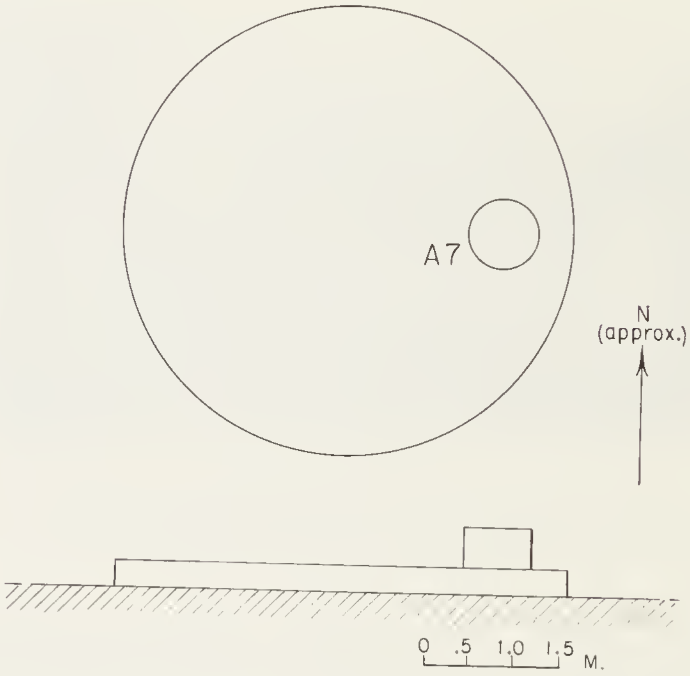


Figure 487. Oxkintok. Plan and section of circular platform and altar west of Structure 2B8.

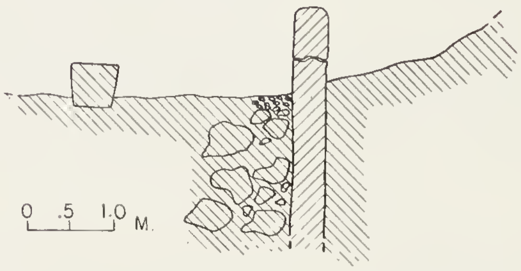


Figure 488. Oxkintok, Structure 2B7. Section through Altar 9 and Stela 9 on west side of structure.

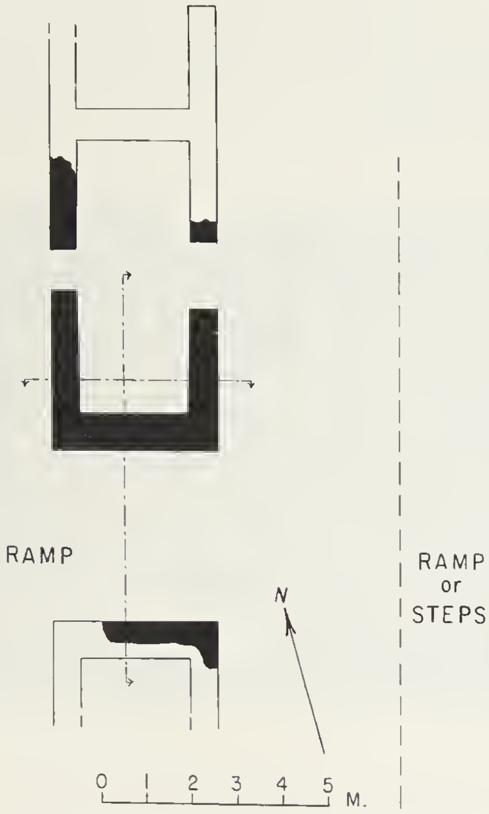


Figure 489. Oxkintok. Plan of Structure 2B8.

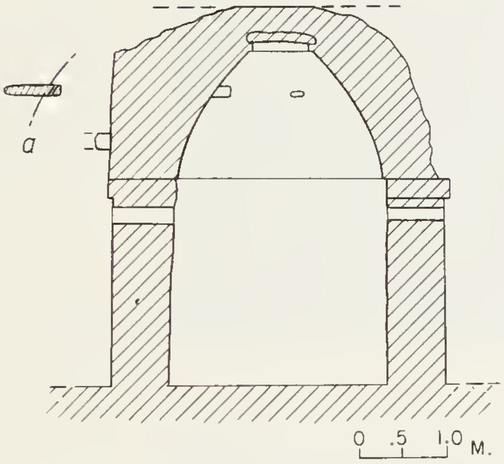


Figure 490. Oxkintok, Structure 2B8. East-west section through room north of portal vault: a, detail of cordholder in east soffit of vault.

spring of vault and on end wall at same level, and small offsets or corbels under capstones. Capstones are undressed slabs.

Molding. Upper facade zone, which carries very slight batter, projects or overhangs at usual level of medial molding (figs. 490, 492). A few stones in projecting course penetrate full width of wall. No cornice molding remaining.

Roof. Trace of old roof surface .40 m above under surface of capstones over room north of portal.

Decoration. Projecting tenon in upper eastern facade may have carried stone or stucco decoration (fig. 492).

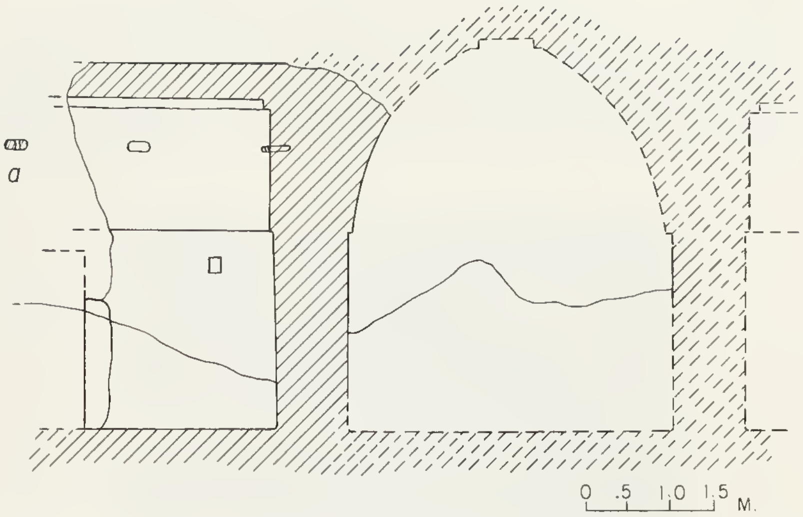


Figure 491. Oxkintok, Structure 2B8. North-south section through portal vault: a, detail of cordholder in room north of portal.

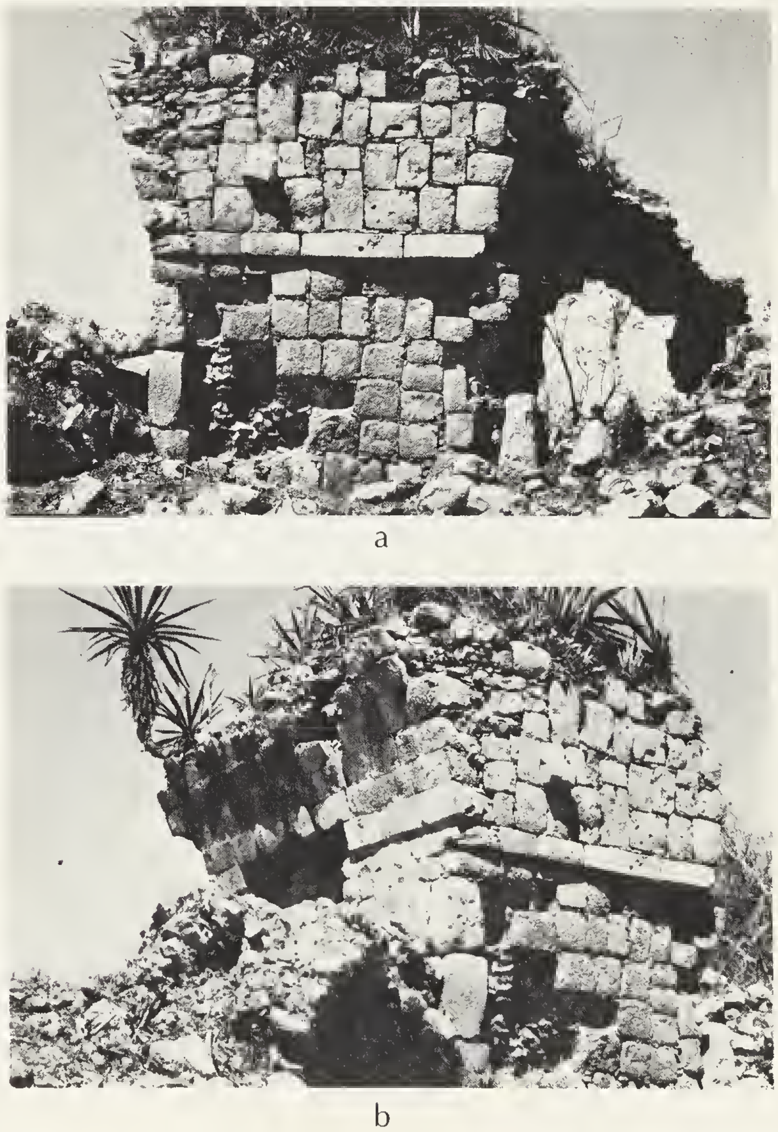


Figure 492. Oxkintok, Structure 2B8: a, remains of east facade, looking west, and showing fragment of portal vault in profile at left; b, standing portion of portal vault and remains of east facade, looking northwest.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

In spite of variety of masonry techniques seen here, the portal vault and the room to the north seem to be contemporaneous. I think the structure is of Puuc workmanship.

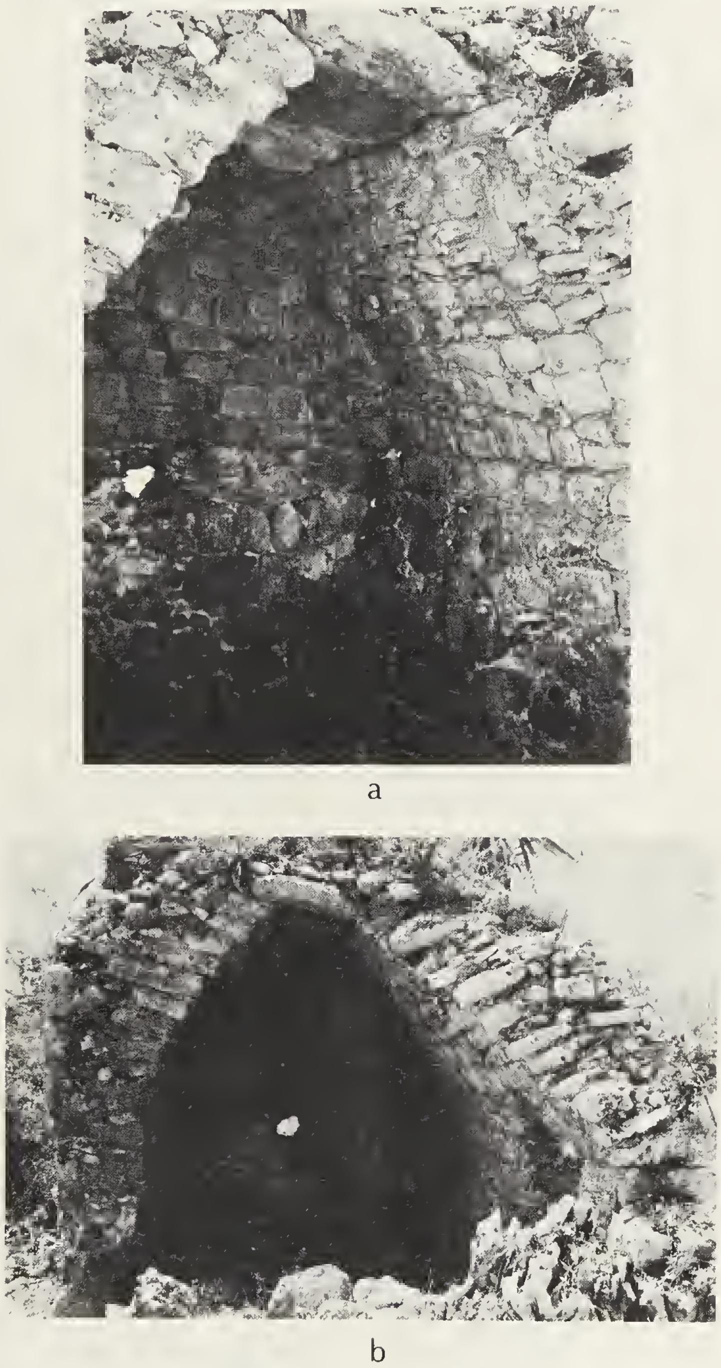


Figure 493. Oxkintok, Structure 2B8. Room north of portal: a, view of interior, looking southwest; b, view from north, showing vault in section.

Structure 2B9

No excavation was carried out here, but there are indications this structure is a ball court with the playing alley oriented north and south. The ball court seems to have been of the broad sloping bench variety, Acosta and Moedano's (1946, pp. 381–382) Type B (and cf. Sayil, Str. 4B3, p. 131). The bench surfaces apparently were paved with flags, and the masonry of the structure is presumably, but not certainly, of the rough early variety at Oxkintok (see Shook 1940, pp. 169–170).

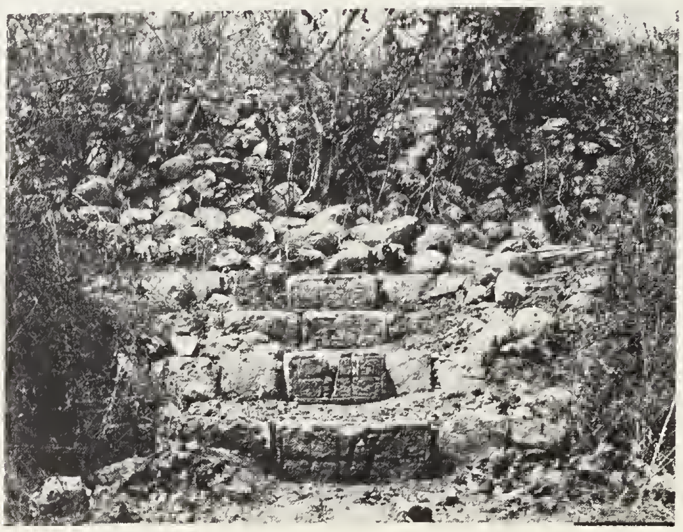


Figure 494. Oxkintok, Structure 2B10. View of stairway, looking south, and showing glyphic inscriptions on four lower steps.

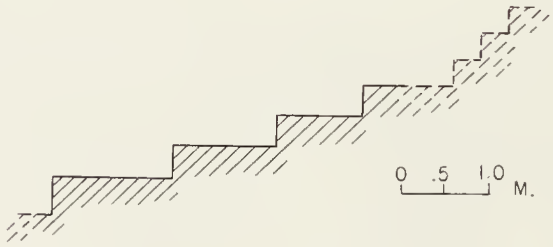
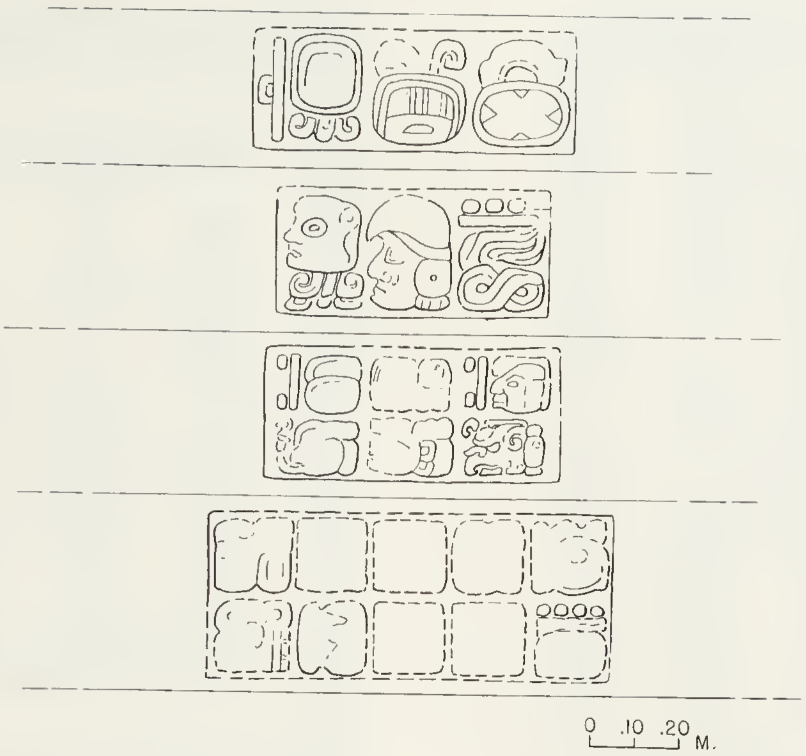


Figure 495. Oxkintok, Structure 2B10. North-south section through lower part of stairway.

Structure 2B10

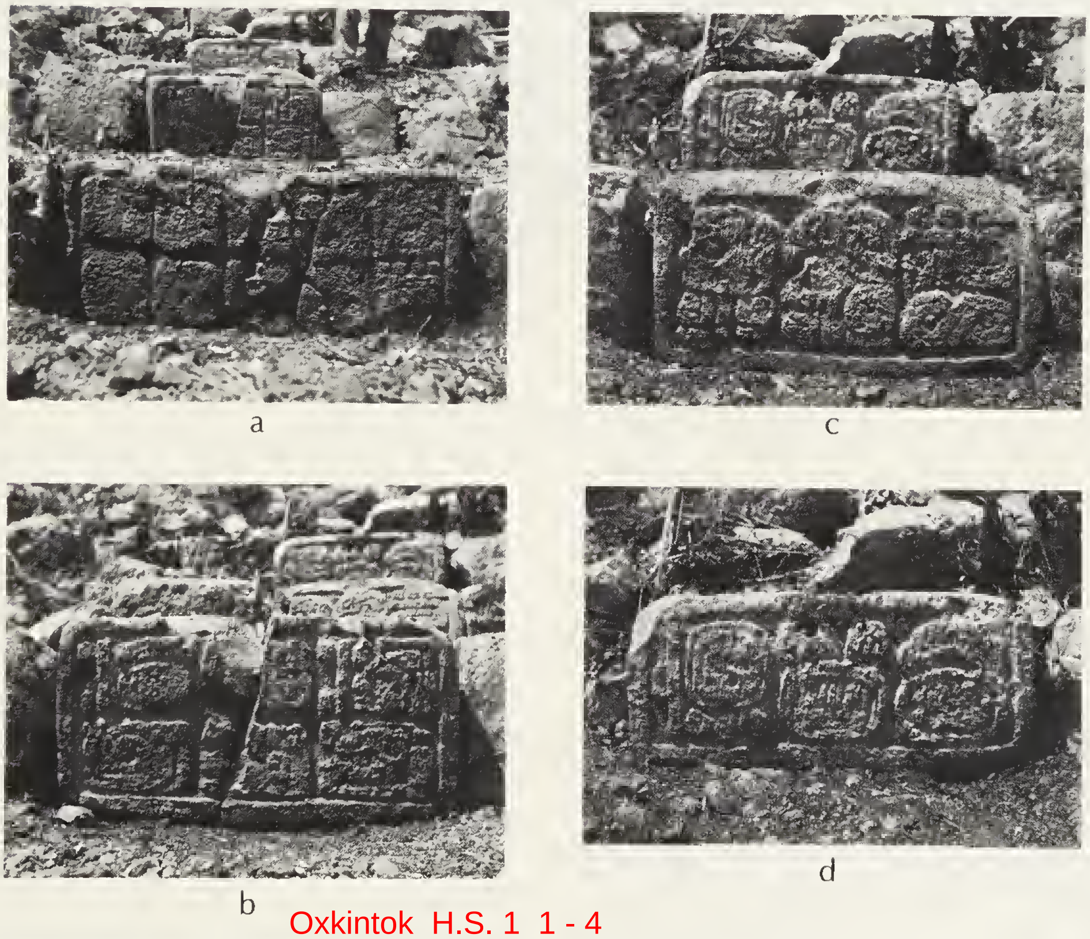
Completely fallen building, apparently of early type construction, rests at top of broad stairway with hieroglyphic inscription (fig. 494). Four lowest steps carry deep treads and consequent gradual ascent, above which stairway seems to be of normal narrow treads and steep pitch (fig. 495). Glyphic inscriptions are centered on risers of four lowest steps (figs. 496, 497).

In the courtyard in front of this stairway, in an east-west line, are Altars 14, 15, and 16, while south of the fallen building, in a higher court, is Altar 17, resting on a small low platform (see Monuments, below). Still further south, a low platform marks the southern edge of the court and beyond the platform, down in the South Plaza, are Stelae 17, 18, and 19 (see Monuments, below).



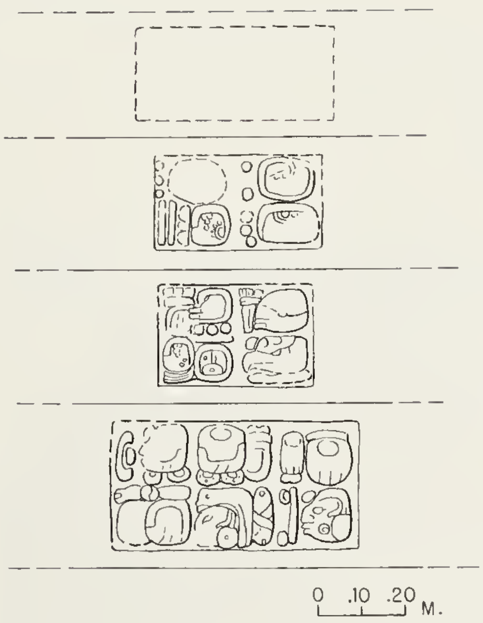
Oxkintok H.S. 1 1 - 4

Figure 496. Oxkintok, Structure 2B10. Glyphic inscription on stairway.



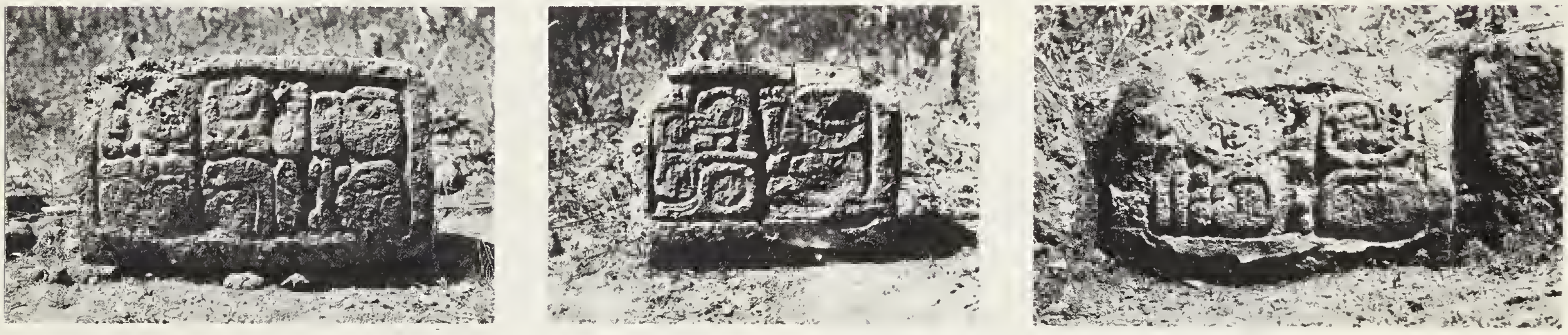
Oxkintok H.S. 1 1 - 4

Figure 497. Oxkintok, Structure 2B10. Hieroglyphic stairway: a, inscription on lowest step, second and fourth steps seen behind; b, inscription on second step, third and fourth steps seen behind; c, inscription on third step, fourth step seen behind; d, inscription on fourth step.



Oxkintok H.S. 2 1 - 3

Figure 498. Oxkintok; Structure 2B11. Glyphic inscription on stairway.


a

Oxkintok H.S. 2 1 - 3

b

c

Figure 499. Oxkintok; Structure 2B11. Hieroglyphic stairway: a, inscription from lowest step; b, inscription from second step; c, inscription in place on third step.

Structure 2B11

Much ruined platform and buildings approached from west by stairway with glyphic inscription. Central stone of each of three lowest steps is carved, and gap in fourth step indicates location of another carved stone, now missing (figs. 498, 499).

Altar 13 and Sculpture M2 rest in the southeast corner of the court upon which Structure 2B11 faces (see Miscellaneous Sculpture and Monuments, below).

Structure 2B12

Only fragments of the masonry of the building atop a high substructure are visible. There seems to have been a central building of rough, early-type masonry flanked at each end by additions built of well cut and dressed stone typical of Puuc construction.

Centered on Structure 2B12, which presumably faced east, and in the court below, are Stelae 15 and 16 and Altars 11 and 12 (see Monuments, below).

Structure 2B13

High pyramid that presumably faces north and seems to be of early-type construction in common with all pyramids at Oxkintok. Structure 2B13 faces Structure 1B3, and the two may form a secondary north-south axis in the plan of the city (see Civic Plan, above).

Structure 2C1

See Other Groups, Structures 2C1, 3C9, 10, 3D1.

Structure 3B1

(Satun Sat, Sat-tunsat, Zatunzat, Tzat un Tzat)

When Father Ponce visited this building in 1588, it was called Zatunzat (see Ciudad Real 1872, 58:443), a title that has persisted to this day and a fine example of the extraordinary persistence of place-names in Yucatan. The name has been translated as lost and lost (Mercer 1896, p. 61; and see Martinez 1929, p. 228, *zaat*) with the meaning of labyrinth.

Structure 3B1 is a three-story building of which the top story is badly fallen and the outer walls of the lower stories are either fallen or covered with debris. Although Structure 3B1 rests at the western edge of the important South Plaza, the building seems to face west away from the plaza. Any substructural terracing that may have supported

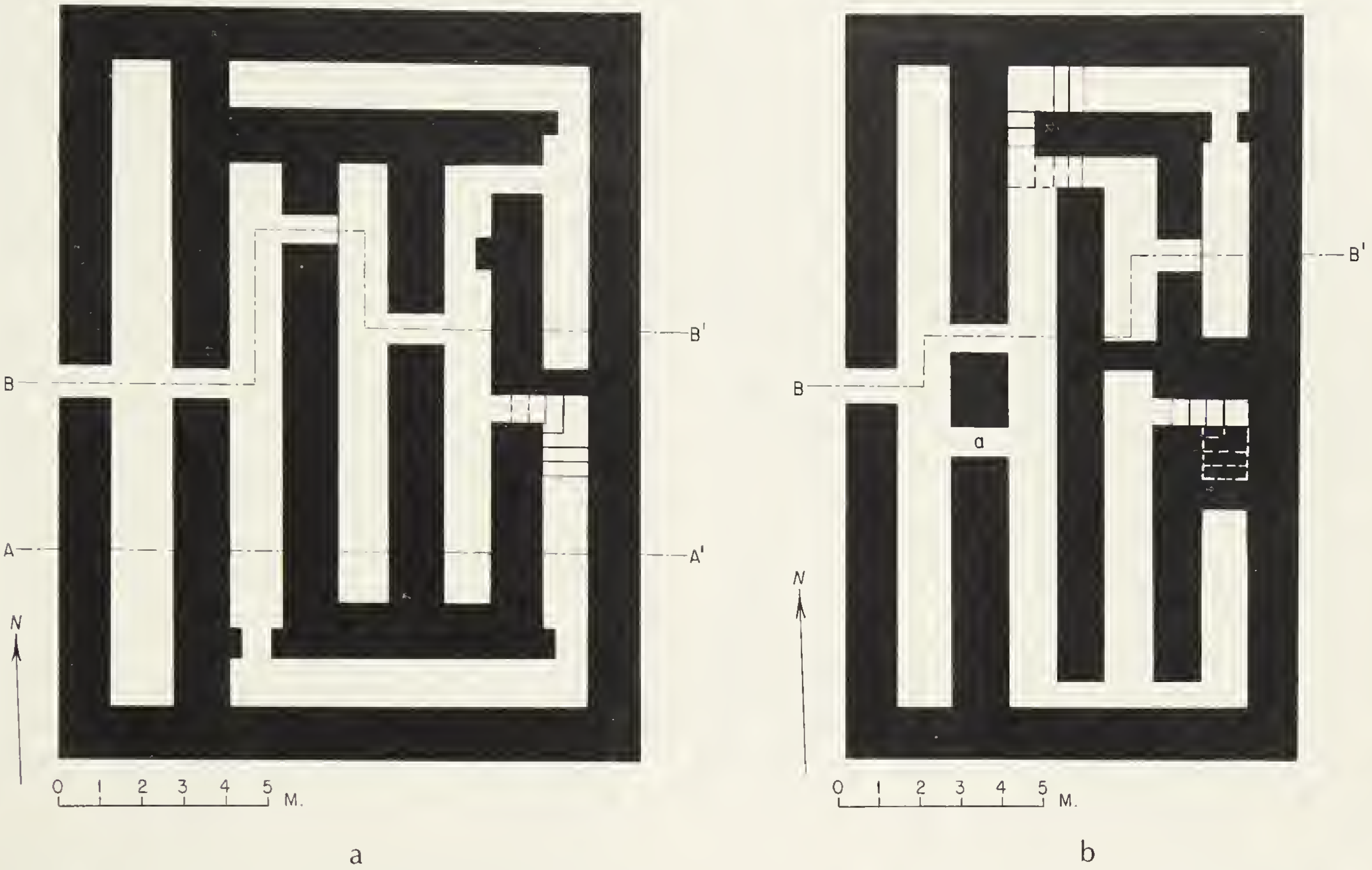


Figure 500. Oxkintok. Plan of Structure 3B1: a, first story; b, second story.

the building is now buried beneath debris, but a part of the structure rests directly on bedrock and any terracing, which should be mainly at the west where the ground slopes away gently, is probably low.

SUPERSTRUCTURE

Plan. See figure 500 (and see Mercer 1896, figs. 22, 23; E.H. Thompson, n.d.b, plate of Sat-tunsat). Third story probably of three longitudinal vaults with transverse vault at north and another at south.

Sections. See figure 501 (and see Mercer 1896, fig. 24).

Base Molding. Exposed only at southeast corner of third story, where simple rectangular molding is visible.

Stairways. Winding interior stairways from first to second and second to third stories (figs. 500, 501). Level of vault over staircase rises in successive stages as stairway rises.

Floors. Highly polished lime plaster where preserved. Floor level, which steps up or down between some rooms, is in part cut out of bedrock. Small exposed area of third-story floor is painted red.

Walls. Run 1.10–1.35 m thick. Very heavy in proportion to room width, which is about same as wall thickness. Walls built of rough block masonry similar to that of Structures 3B5, 3C5, and 3C6 (see below). Mortar between facing stones seems to be of mud from common red earth known as kancab, but hearting probably contained lime mortar. At places walls are cut from bedrock or from deposits of sascab, a disintegrated limestone, which at one point rises to height of spring of vault (see Mercer 1896, pp. 61–63, for description of wall masonry). Wall surfaces originally were covered with lime plaster, some of which is preserved.

Doorways. Jambs built like walls, but with stones at corners faced on two sides. All lintels of stone, sometimes resting on corbels at top of jambs (fig. 501). Doorways quite narrow, averaging about .70 m.

Wall Openings. Many rectangular windows or ventilators in exterior and interior walls (fig. 501). Openings run about .20 to .30 m on a side and are roughly square.

Vaults. Simple stepped vaulting of three projecting and overlapping courses of roughly shaped stone bridged at the top by rough capstones (figs. 501). Ends of vaults sometimes stepped, sometimes plain wall. Vaulting like that of Structure 1B1 (see above). Seem to have been no vault beams. Span of vaults only 1.10–1.30 m.

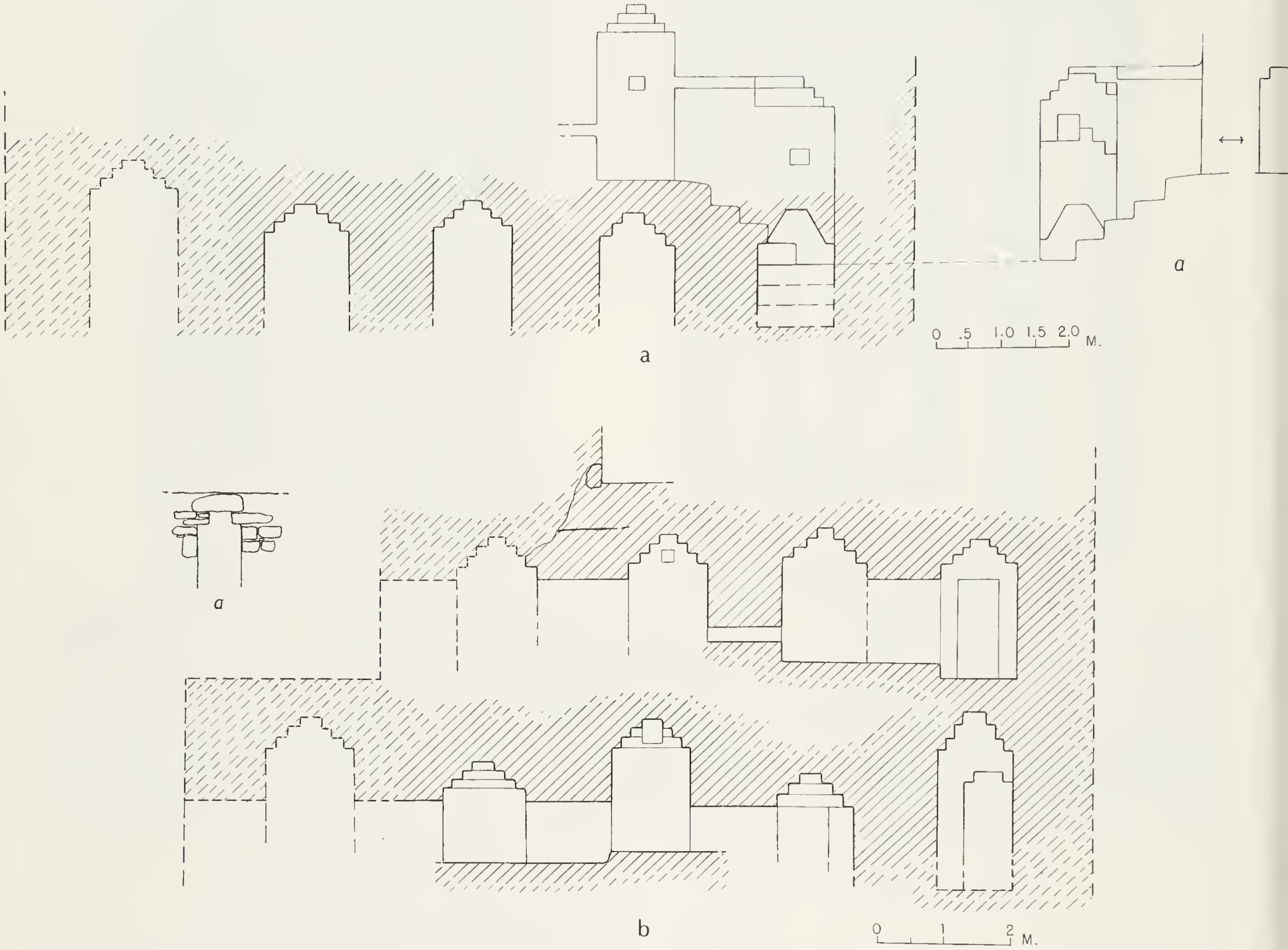


Figure 501. Oxkintok, Structure 3B1: a, transverse section (A–A′) through first story, and detail (a) of upper flight of stairway to second story, looking south; b, transverse section (B–B′) through first and second stories and detail (a) of second-story doorway, looking west.

Structure 3B2

At the southern end of the South Plaza is a very large platform, near the center of which is Structure 3B2, a large pyramid temple (fig. 477). The platform, which supports a number of structures, is approached from the north by a broad stairway that leads to the court upon which Structure 3B2 faces. A low platform or terrace at the foot of, and to the west of, the broad stairway holds Stelae 20 and 21; Altar 18 rests near the foot of the stairway of Structure 3B2; and some 50 m northeast, close to the edge of the great platform, is Sculpture M8 (see Miscellaneous Sculpture and Monuments, below).

The much ruined Structure 3B2 is a high pyramid that faces north and once supported a temple building. Traces of the stairway still show on the north face of the pyramid and there are also remains of what seem to have been niches in the terrace walls at each side of the staircase. The temple building, almost completely fallen, was probably of two rooms with a central doorway in the front (north) wall and another in the medial wall. Enough of the medial wall remains to show that the building was of rough block masonry. Traces of a floor, presumably of the latest building but possibly of an earlier one, run under a wall and turn down at the face of a simple rectangular base molding.

At the base of Structure 3B2, on the east, are two projecting mounds that represent the debris of fallen vaulted buildings, and to the northwest of the pyramid is the debris of other vaulted buildings that had been constructed of the crude, presumably early, type of masonry. West of Structure 3B2, and also to the southeast are a number of low platforms that seem to mark the location of what once were dwellings.

Structure 3B3

Badly fallen building that seems to have faced north. Remains of several vaults and a rear (south) wall that stands to the height of, and includes, the medial molding (fig. 502) show the structure to have been of typical Puuc design with colonnettes in the molding and upper facade zone. All stone well cut and dressed, and large stone lintels and full-width jamb stones in debris.

Immediately in front of Structure 3B3 are Altars 19 and 20, and just east of the building, at the foot of the debris from the wall of the main platform, is Sculpture M7 (see Miscellaneous Sculpture and Monuments, below).

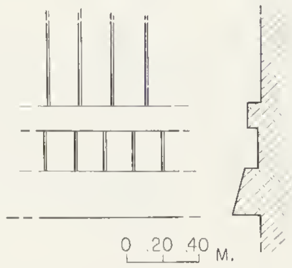


Figure 502. Oxkintok, Structure 3B3. Elevation and section of medial molding and split columns on south facade.

Structure 3B4

Mound with fallen remains of typical Puuc masonry and stone carving. Beside common "spool" elements used in banded facade columns and in moldings, debris contains more elaborate spools with double bevel above and below middle band (fig. 503).

Just north of this mound, between it and Structure 3B3, is an underground reservoir, or chultun, the opening surrounded by a circular pavement or catch basin to funnel rain water into the cistern.

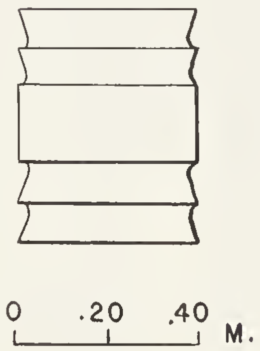


Figure 503. Oxkintok, Structure 3B4. Fallen decorative element from facade.

Structure 3B5

See South Group, Structures 3B5–7.

Structures 3C1–3

Three fairly high and very steep pyramid temples on the east, south, and west sides of a largely enclosed court (fig. 477). All are badly fallen, the western pyramid, Structure 3C1, being in a state of such collapse as to provide no architectural detail. It presumably faced east on the court.

Structure 3C2, the eastern pyramid, faced west, on which side are the remains of a broad stairway (fig. 504) that divides near the top into two narrow flights of steps separated by a large, centrally placed block of masonry. At each side of the stairway near court level there appear to be the remains of vaulted rooms. Only a few stones in the lower courses of the walls of the temple building are in

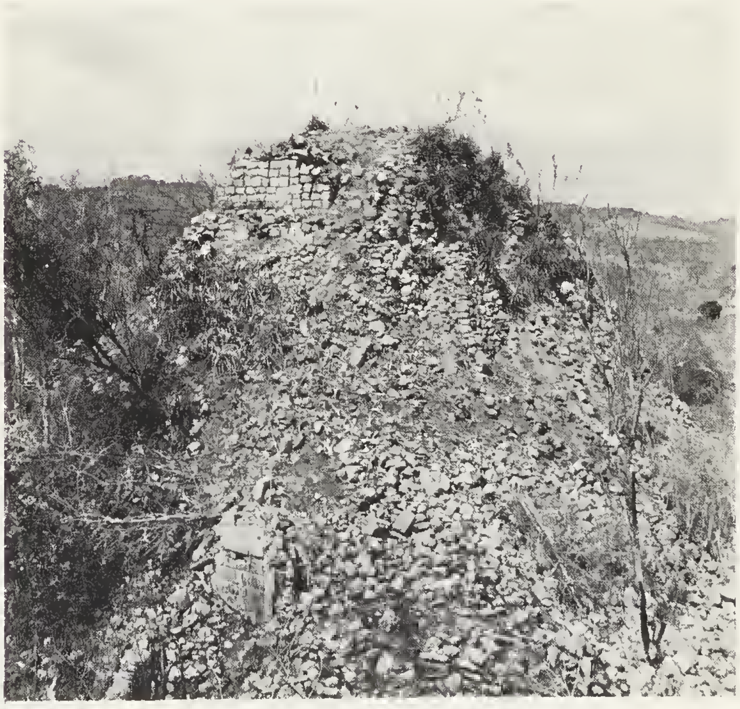


Figure 504. Oxkintok, Structure 3C2. View of pyramid and debris of temple on summit, looking northeast.

place and visible. The masonry of what seems to have been a two-room structure is of the crude, presumably early, type.

Structure 3C3, the southern pyramid temple, is also badly fallen, but vestiges of the stairway on the northern side of the structure are discernible. The temple building at the top of the pyramid is completely fallen, and only traces of the inner wall faces at floor level are now visible. Against the rear wall are the remains of a little shrine room (fig. 505a).

Stela 25 lies in the court at the foot of the stairway of Structure 3C3 (see Monuments, below). Stela 26, now fallen, originally was in a niche near the bottom of the stairway to Structure 3C3. The niche was centrally located at the foot of a flight of steps that rose from a low landing at the top of four steps with broad treads (fig. 505b). The base of the monument rested on a step of an earlier stairway and was supported by the masonry of the later stair landing and the rear wall of the niche in the still later stairway (see Monuments, below).

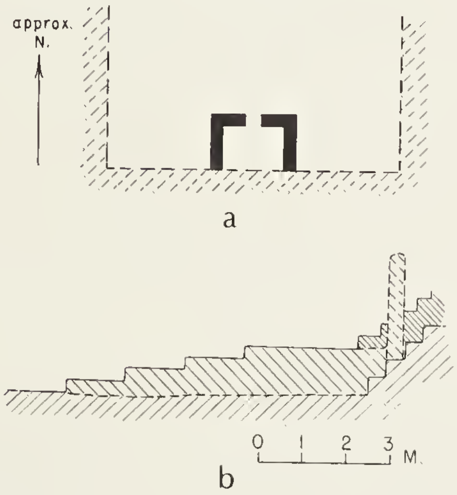


Figure 505. Oxkintok, Structure 3C3: a, sketch plan of shrine at rear of temple chamber; b, north-south section through foot of stairway and Stela 26.

Structure 3C4

Fairly large but completely fallen structure that is notable primarily in having Stelae 23 and 24, Altar 21, and Sculpture M3 near its western base in the South Plaza (see Miscellaneous Sculpture and Monuments, below).

Structures 3C5, 6

Although these buildings, which are joined at their respective east and west ends, are in an advanced state of decay (fig. 506), they nevertheless offer a relatively large amount of information on the early architecture of Oxkintok. It is, moreover, in Structure 3C6 that is found the carved lintel carrying the hieroglyphic inscription 9.2.?.?.? (A.D. 475 ?), an inscription that presumably dates the building. In front of Structure 3C5, near the end of a causeway that traverses the South Plaza from the court of Structures 2B9, 10 to the court of Structures 3C5, 6, is Altar 22 (see Monuments, below). Sculptures M4 and 5 lie directly in front of Structure 3C6, and a little farther out in the court, by the southern edge of a small rectangular platform, are Altars 23 and 24 (see Miscellaneous Sculpture and Monuments, below).

Structure 3C5

SUPERSTRUCTURE

Plan. See figure 507.

Section. See figure 508.

Base Moldings. Simple rectangular molding .19 m high formed of single course of roughly shaped and dressed stone that projects .09 m (fig. 508) and is comparable in quality to wall facing above. Similar molding at base of northern face of medial wall, thus forming step up to inner (south) rooms.

Floors. Floor level rises from front to rear chambers, as explained above. Secondary floor outside of building

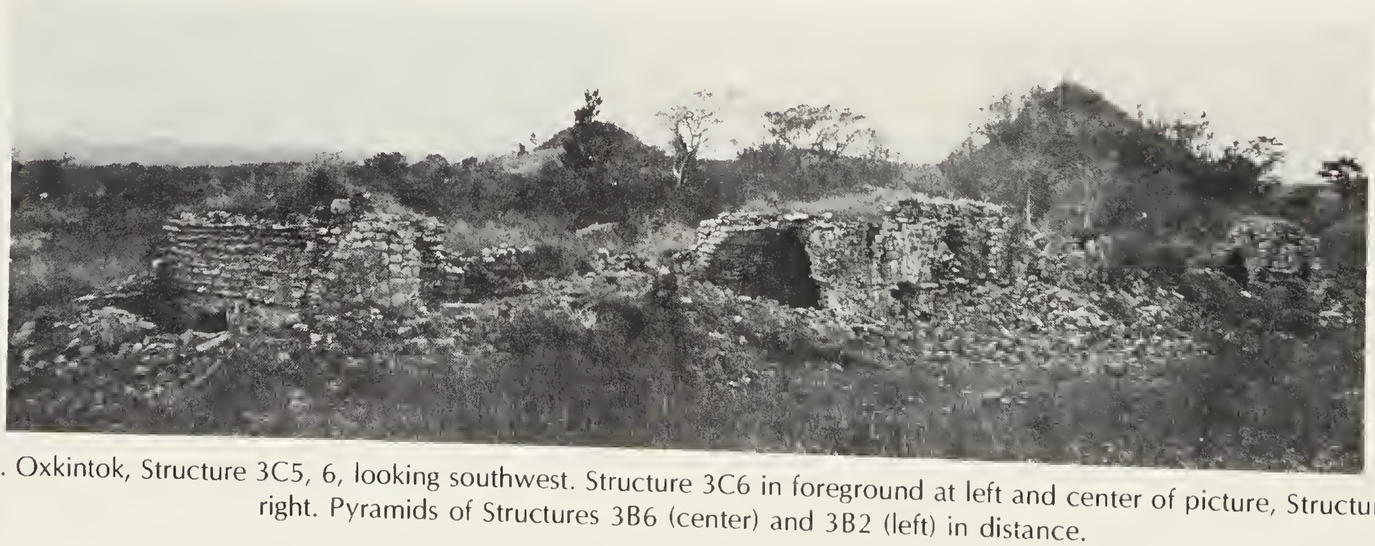


Figure 506. Oxkintok, Structure 3C5, 6, looking southwest. Structure 3C6 in foreground at left and center of picture, Structure 3C5 at right. Pyramids of Structures 3B6 (center) and 3B2 (left) in distance.

that buried original base molding (fig. 508).

Walls. Front (north) wall .70 m thick, medial wall .90-.93 m thick; no good measure on primary transverse walls and rear (south) wall. Secondary transverse wall .58 m thick in eastern half of what was originally long rear chamber and probably similar secondary wall in western half (fig. 507). May also have been transverse walls in long front room, but cannot be certain without excavation.

Walls built of a hearting of rubble and lime mortar that is retained by facing stones that are roughly shaped and dressed blocks laid in irregular courses with the plentiful use of spalls between stones (figs. 508, 509, 511). Interior wall masonry generally of poorer quality than that on outside of building (see Shook 1940, p. 168, for description of masonry).

Doorways. None remains intact. Construction presumably same as that employed in Structure 3C6 (see below). Question of location of entrances to end rooms, but probably from each end of long front chamber.

Wall Openings. Rectangular windows or ventilators measuring from about .12 to .20 m on a side penetrate front and rear walls just below level of medial molding (figs. 509b, 510). Also at least one such opening in medial wall .25 m below spring of vault.

Vaults and Beams. Vaults built of rough slabs that have been crudely trimmed to square off exposed ends but otherwise show little effort at shaping (fig. 508). Occasional use of a blocklike or triangular stone (fig. 511) that could foreshadow later Puuc vaulting, but vast majority of stones are slabs. Capstones also are rough slabs. Vaults built with crude exterior masonry face that was later covered by upper facade masonry (figs. 508, 509, 511). This forecasts later Puuc practice (see Sabacche, Structure 5, fig. 147), but no indication here of break in construction below medial molding. Shape of vault varies from straight sided (fig. 511) to bottle necked (fig. 508). Ends of vault nearly vertical but slight inward lean. Offset at spring of vault carried across ends of rooms. Bare suggestion of small offsets or corbels beneath capstones. Rough vault faces finished with plentiful use of mortar that penetrated chinks between stones and evened off surface that then received final coat of fine hard plaster.

Some question as to arrangement of vault beams. Beam sockets are found in wall just below spring of vault and at various levels in vault faces (fig. 511), but precise pattern of vault beams, if there was any standard arrangement, is obscure.

Moldings. Short stretch of medial molding is intact on north facade (fig. 509). Consists of lower heavy rectangular member built of two courses and topped by a smaller projecting rectangular member (fig. 508). Quality of stone cutting is comparable to that of wall stone, possibly cruder.

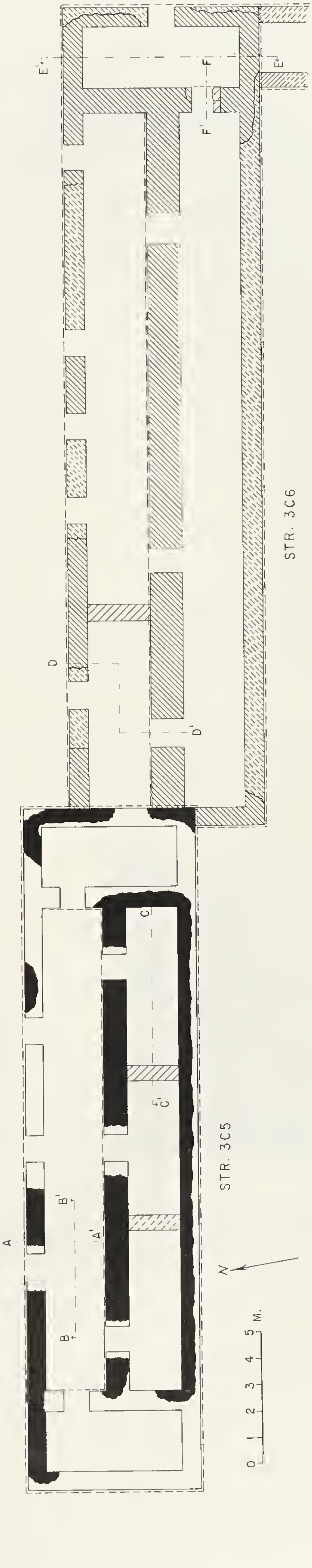


Figure 507. Oxkintok. Plan of Structures 3C5, 6.

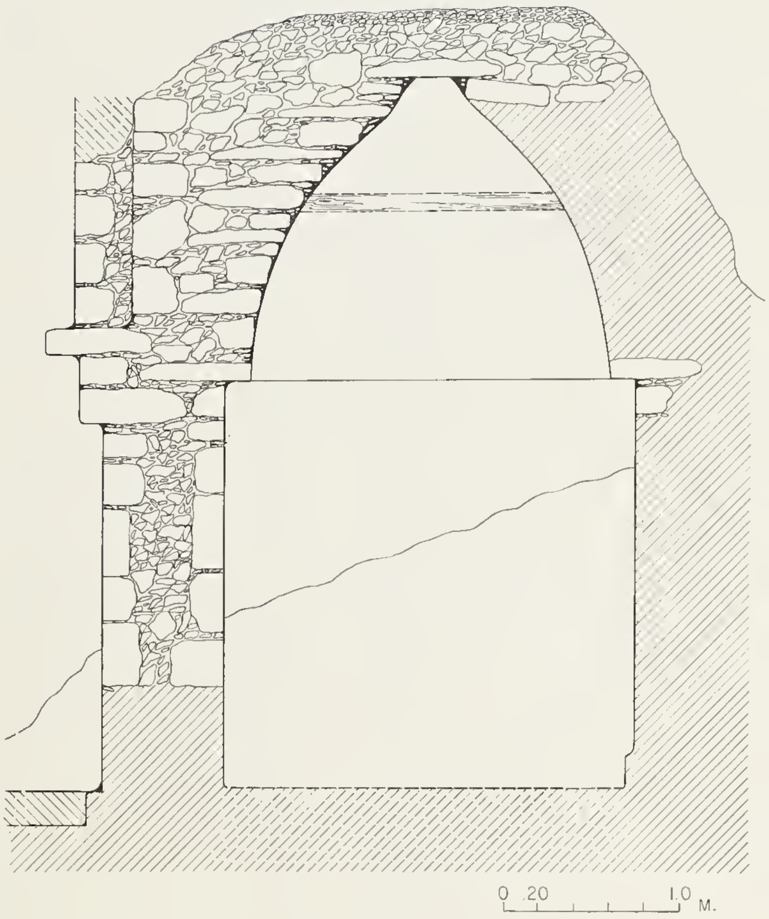


Figure 508. Oxkintok, Structure 3C5. Transverse section (A–A′) through front room.

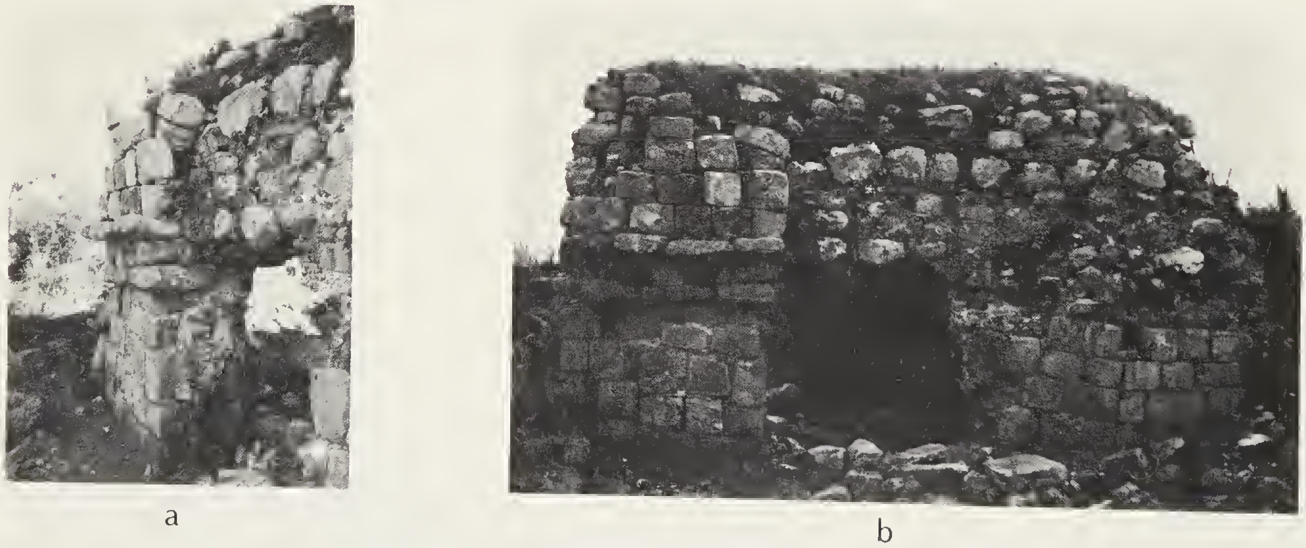
Medial molding at east end of building, where Structure 3C6 joins Structure 3C5, is different from that just described and like medial molding of Structure 3C6 (see below). Where molding changed from one design to other is not known but might have been at corner (northeast) of building. No trace of cornice molding remains.

Roof. No roof surface preserved but presumably standard roof construction as seen in Structure 3C6 (see below).

Decoration. None standing and visible. Fragment of modeled stucco and several large stone pegs or tenons found in front of building as though fallen from facade. Large fragment of stucco decoration (fig. 512) found in east room. May have come from fallen east facade, which apparently toppled inward (i.e., westward), or possibly from end of flying facade on Structure 3C6.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Later floor at front of building and transverse walls in long rear chamber are secondary construction. East end of Structure 3C5 seems clearly to underlie walls of Structure 3C6, thus establishing 3C5 as the earlier building.


a

b

Figure 509. Oxkintok, Structure 3C5. Front wall at west doorway: a, looking southeast, and showing wall, medial molding, and upper-facade construction; b, looking south, and showing gap where doorway had been, as well as wall, molding, and facade masonry.

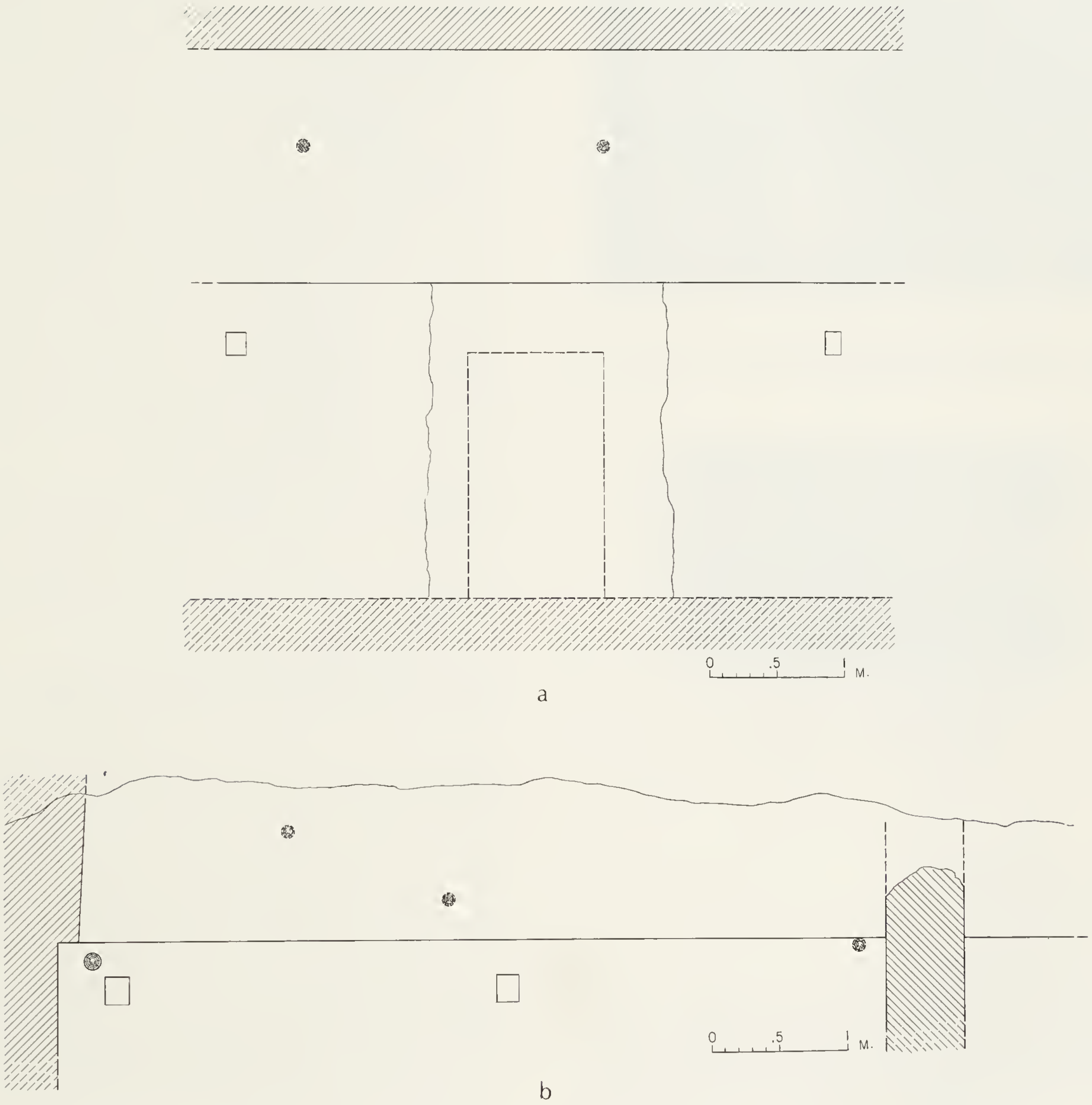


Figure 510. Oxkintok, Structure 3C5: a, longitudinal section (B–B′) in front room, and elevation of part of north side of room; b, longitudinal section (C–C′) in rear room, and elevation of part of south side of room.

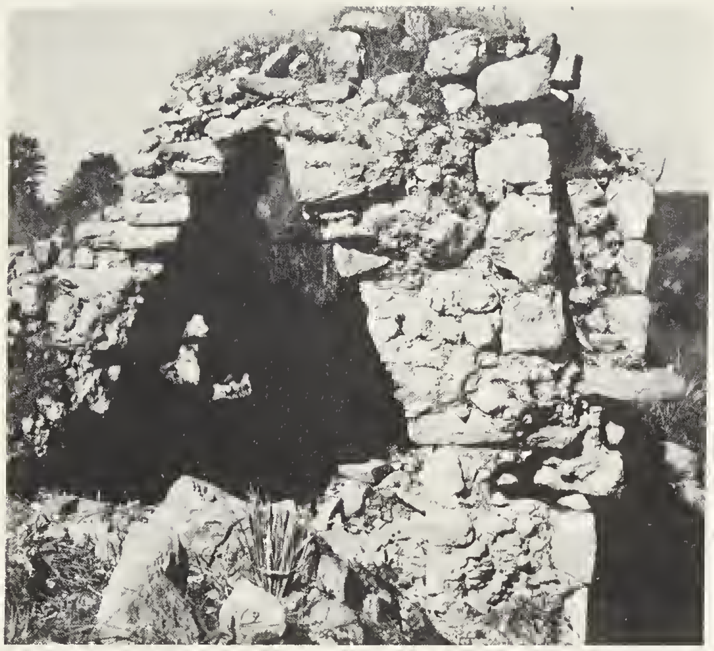


Figure 511. Oxkintok, Structure 3C5. Remains of front room, looking west, and showing wall, vault, and upper facade in section.

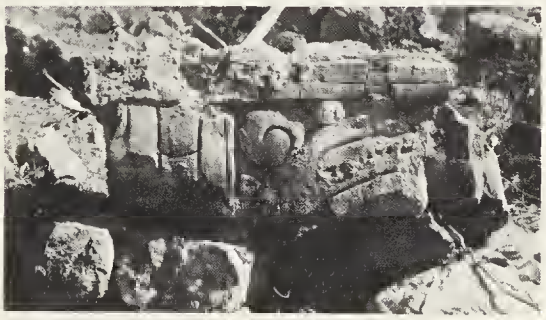


Figure 512. Oxkintok, Structure 3C5. Fragment of modeled stucco in debris in east room.

Structure 3C6

SUPERSTRUCTURE

Plan. See figure 507.

Sections. See figure 513.

Base Moldings. Presumably same as those of Structure 3C5 (see above) but deeply buried and not uncovered. No molding at base of rear wall of east room, so molding at foot of north face of long medial wall may also be lacking.

Floors. Situation in front of building assumed to be same as floors in front of Structure 3C5 (see above) but not certain. Excavation in doorway between east and south rooms showed three floors (fig. 514) of which lowest was probably a construction level or work floor. It runs under the doorjambs and may underlie all walls of the building. The second floor level, and first finished floor, rises from the east room to the long south room, and there is presumably a rise in floor level from the north rooms to the south room (fig. 513a). The third and final floor level was observed only in the east room (figs. 513b, 514). It may or may not be associated with some late floor outside the building.

Walls. Front (north) wall about .72–.82 m thick, transverse inner wall at east about .95 m, medial wall 1.25–1.30 m, no measure on rear wall. Secondary transverse wall .65 m thick in western part of long front chamber (fig. 507). May have been similar wall in eastern part of same room but not ascertainable without excavation.

Wall construction and masonry virtually identical to that of Structure 3C5 (see above), and a good deal more wall to observe (figs. 513a, 515, 516a).

Doorways. Standing doorways run from about .90 to 1.10 m in width. Tend to narrow from bottom to top (fig. 513b). Jambs built of wall stones, those at corners being faced on two sides in manner of usual corner wall stone. All doorways seem to have been spanned by stone lintels. Lintel over western doorway in medial wall, which carries Initial Series date (see Dates, above), consisted of two stones, side by side, the southern one of which is missing (fig. 513a). Missing stone presumably was carved with glyphs that completed Initial Series.

Secondary jamb built against original south jamb of doorway between east and long south room (fig. 513b), thus narrowing passage. Carved stone at bottom of masonry that forms secondary jamb (see Decoration, below).

Wall Depressions. Rectangular niches in end and rear (west) walls of east room (fig. 513b).

Vaults and Beams. Essentially the same as vaults in Structure 3C5 (see above) but with tendency to lay slabs at an angle from the horizontal, tilting upward at the exposed ends (figs. 513a, 515b, 516, 517). Possibly greater use of bottle-necked shape but profile may vary considerably within each vault. Ends approach vertical (fig. 513b) as in Structure 3C5. Rough walls that form temporary outer facing of vault during construction of building (fig. 513) indicate that front (north) vault was built before rear vault, but no reason to assume any appreciable time interval during construction.

Usual arrangement of vault beams seems to have been in spring course, and .30–.50 m below capstones (fig. 513). Number of beams uncertain except in east room.

Moldings. Heavy rectangular medial molding built of two courses of stone (figs. 513a, 515a). Fragment of north wall preserved where building joins Structure 3C5 shows that upper facade at that point rose flush with outer face of medial molding, thus marking the end of a sunken panel framed by the medial and cornice moldings and the raised vertical band here described.

No cornice molding remains standing.

Roof. Standard construction of small stone and mortar capped by layer of smooth plaster (fig. 513). Thickness of roof, from upper surface to under side of capstone of vault, .30–.40 m.

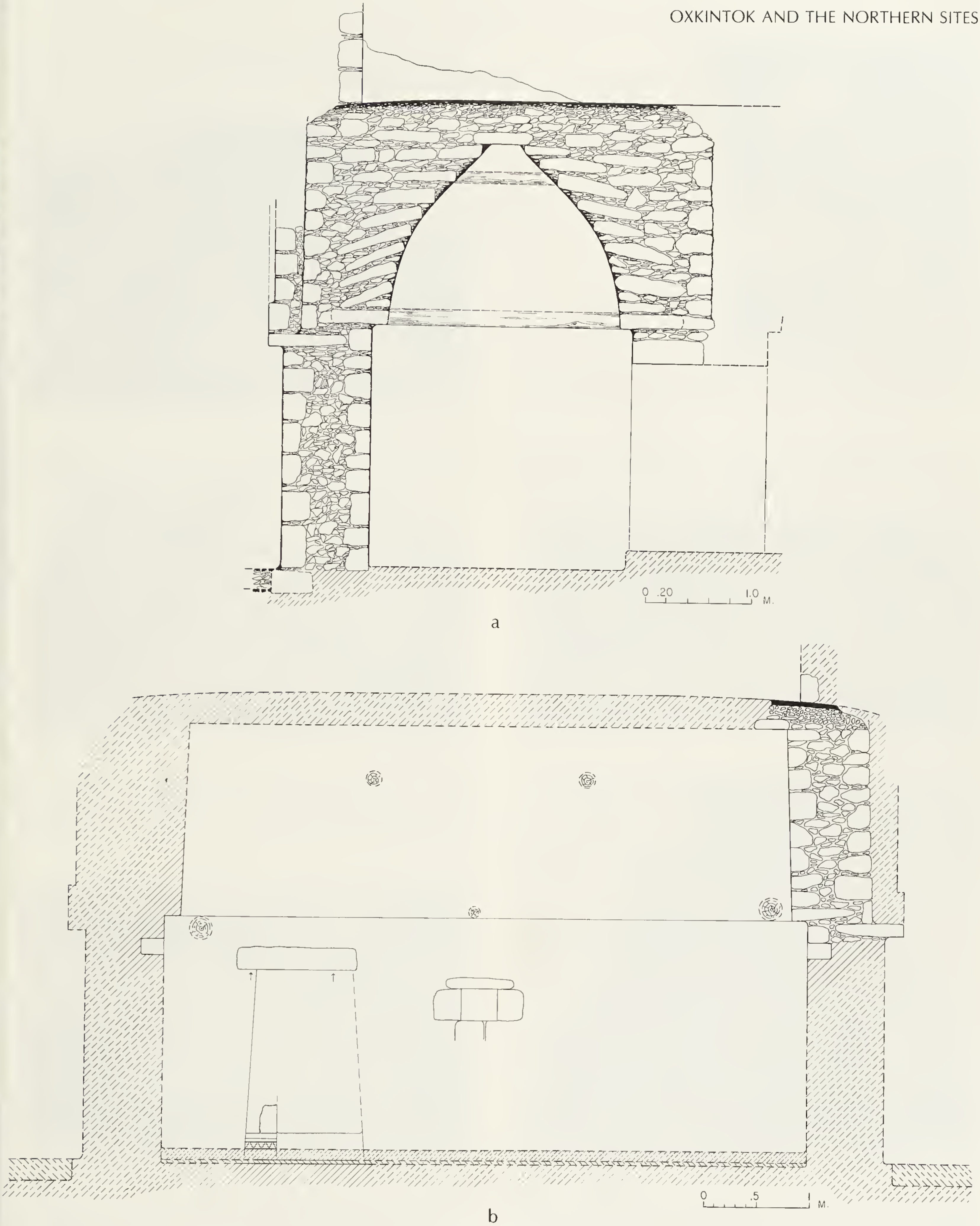


Figure 513. Oxkintok, Structure 3C6: a, transverse section (D–D′) through front room; b, longitudinal section (E–E′) through east room, and elevation of west side of room. Arrows below lintel mark limits of carving.

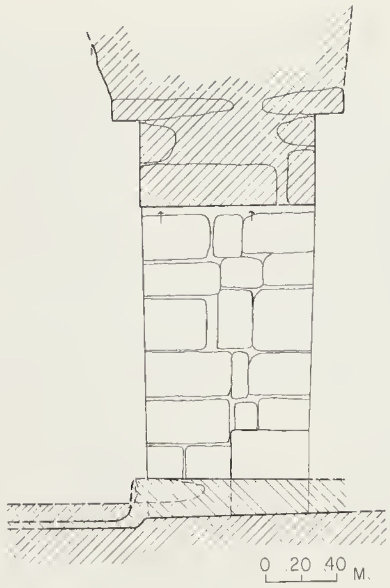


Figure 514. Oxkintok, Structure 3C6. East-west section (F–F′) through doorway between east and south rooms, and elevation of south jamb. Arrows below lintel mark limit of carving.

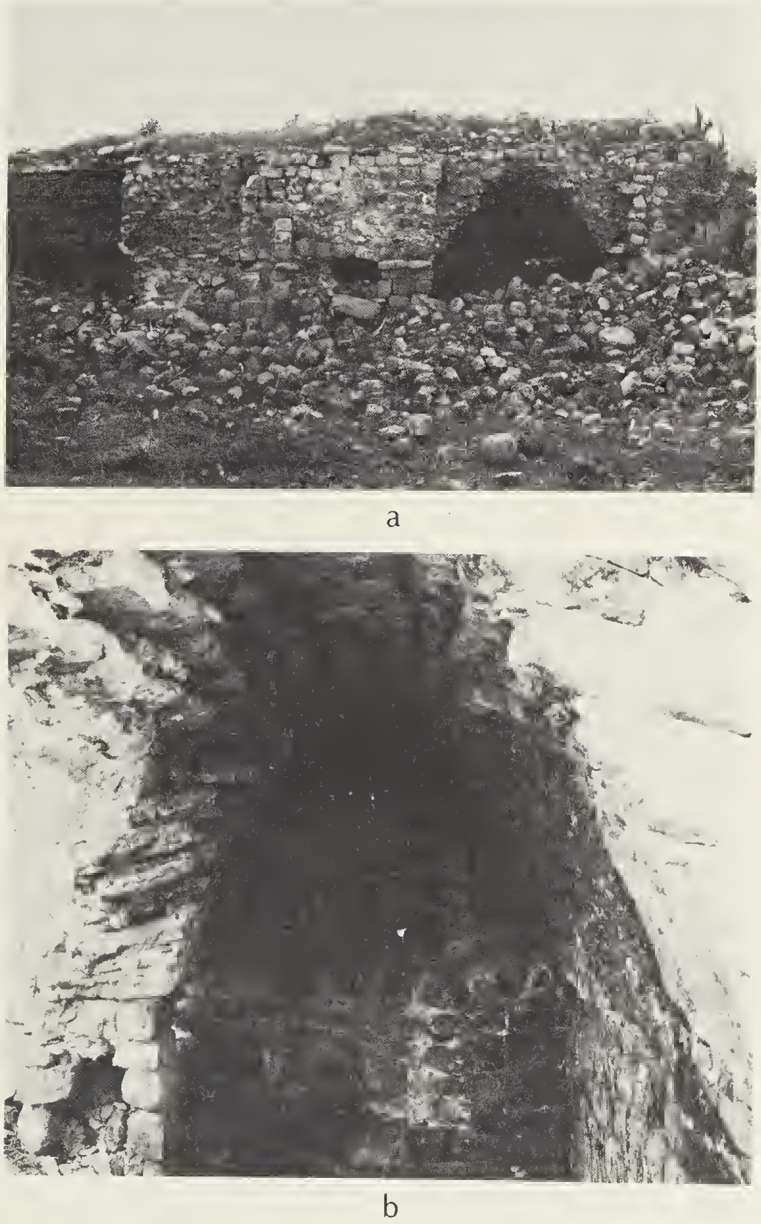


Figure 515. Oxkintok, Structure 3C6: a, remains of front wall at west doorway, looking south; juncture with Structure 3C5 seen at right; b, east end of northwest room, looking east, and showing wall and vault construction.

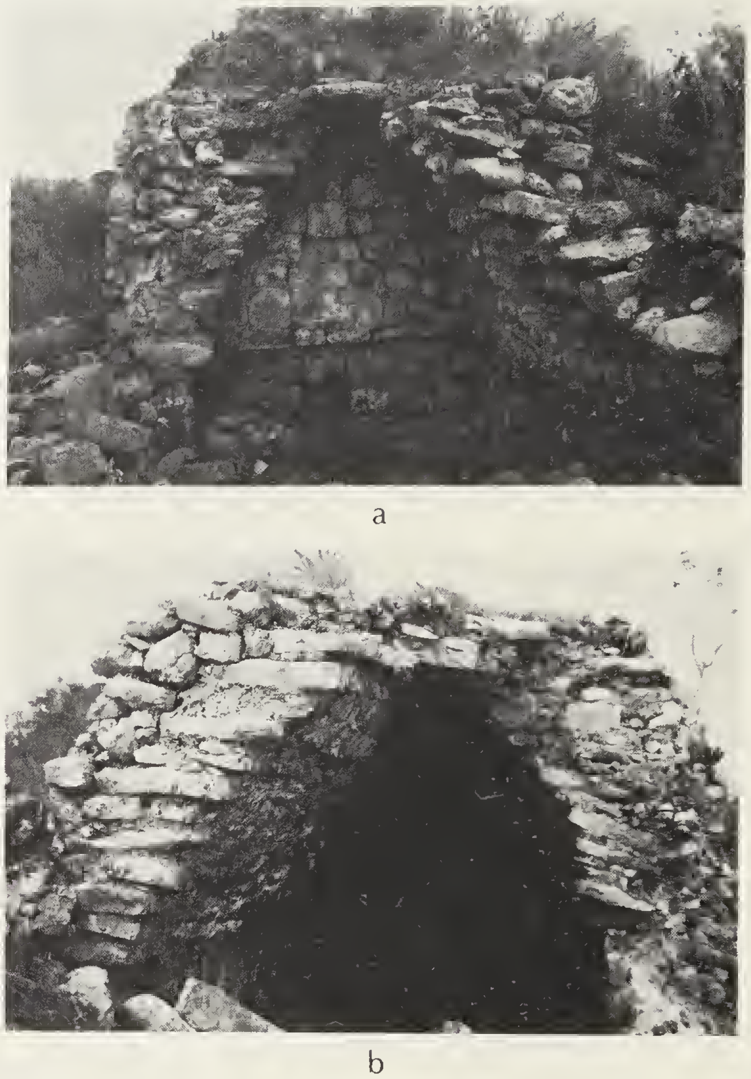


Figure 516. Oxkintok, Structure 3C6. Center front room: a, east end, looking east, and showing wall and vault construction; b, west end, looking west, and showing vault in section.

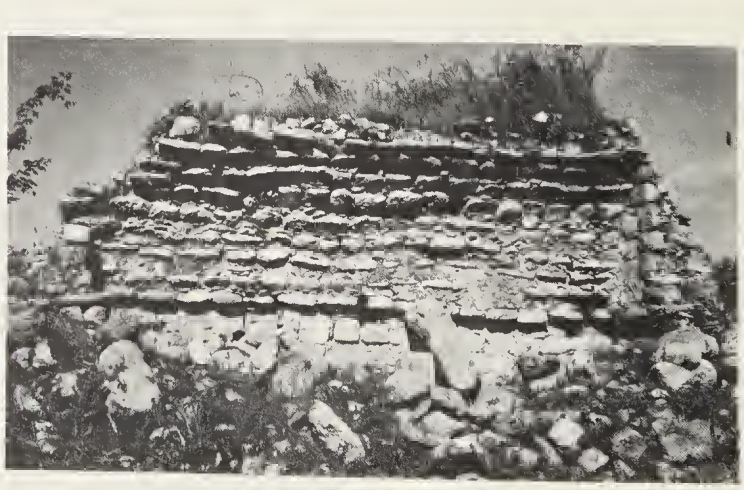


Figure 517. Oxkintok, Structure 3C6. West side of vault of east room, looking west, and showing vault construction.

Roof Structure. Traces of flying facade that seems to have run whole length of building. Fragments of rear (south) face all that remain (fig. 513). No indication of type of flying facade. Roof surface runs underneath roof structure.

Decoration. Sunken panel or panels in upper facade zone (see Moldings, above) very likely carried decoration, probably of modeled stucco, but none preserved and visible, and only excavation in front of building could confirm this supposition. Flying facade might also be assumed to have carried some decoration, probably stucco, but again none observed.

Two lintels sculptured with hieroglyphs on their under surfaces. Lintel over western doorway in medial wall (see Doorways, above) carries beginning of Initial Series inscription (fig. 518a; and see Shook 1940, figs. 1 and 6; Maya and Their Neighbors 1940, pl. 1) that presumably was completed on missing southern half of lintel. Another hieroglyphic inscription (fig. 518b) on lintel of doorway leading from east room to long south room (figs. 513b, 514).

Carved stone (fig. 518c) at base of secondary masonry built against south jamb of doorway between east and south rooms (figs. 513b, 514). Stone is of molding variety and suggests Puuc workmanship.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Juncture of Structure 3C6 with Structure 3C5 shows 3C6 to be the later construction. Within Structure 3C6 some secondary flooring, one or more secondary transverse walls, and the narrowing of the doorway between the east and south rooms (see Floors, Walls, Doorways, all above) are the only secondary building operations visible without more excavation. The plaster roof stratum beneath the flying facade (see Roof Structure, above) probably represents the normal building procedure and does not necessarily indicate any appreciable lapse of time before the flying facade was erected.

At the east end of Structure 3C6 an almost completely fallen southern wing joins the south wall of the east room (figs. 477, 507). A small excavation at the juncture of the west wall of the south wing and the rear wall of Structure 3C6 showed the south wing to be secondary to the main building. Both the rear wall and the medial molding of Structure 3C6 underlie the walls of the southern extension. The masonry of the south wing is of well-cut and dressed wall stone, typically Puuc in character, and in the fall of the building were observed well-cut full-width jamb stones and large well-cut stone lintels, also characteristic of Puuc construction.

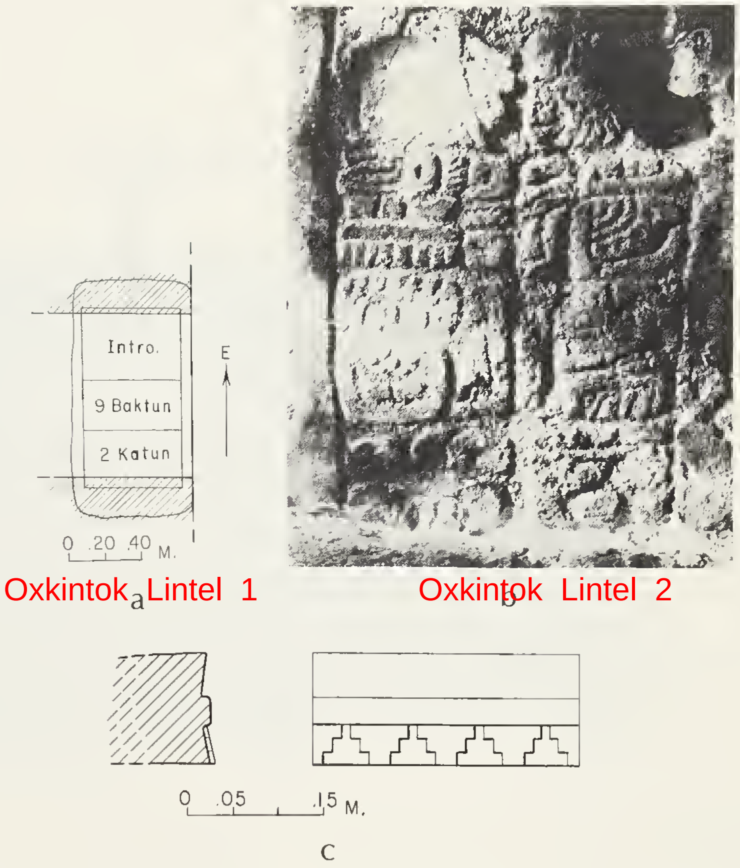


Figure 518. Oxkintok, Structure 3C6. Decoration: a, lintel with Initial Series date over west doorway in medial wall; b, lintel carved with glyphs over doorway between east room and south room; c, section and elevation of stone in secondary jamb of doorway in b (see figs. 513b, 514).

Structure 3C7

Considerably fallen but nevertheless best preserved building of Puuc-style masonry in central section of city. Near center of court in front (west) of building is a small rectangular structure of the variety usually referred to as an altar or ceremonial platform. Between the little platform and Structure 3C7 is an underground cistern or chultun.

SUPERSTRUCTURE

Plan. See figure 519.

Section. See figure 520.

Base Molding. Buried and not uncovered. Restored in section (fig. 520) as single projecting course of stone.

Floors. Secondary floor about .05 m above original floor observed in west center doorway. Floor level rises about .25 m to inner rooms (fig. 520). Presumably simple base molding at foot of rear wall of long western room. Floor level of east rooms seems to have been same as that of inner rooms.

Walls. Outer walls run .60–.70 m thick; interior longitudinal wall between western and inner rooms .60 m thick; eastern interior longitudinal wall .90 m thick; interior transverse walls .60–.65 m thick except at north end of north

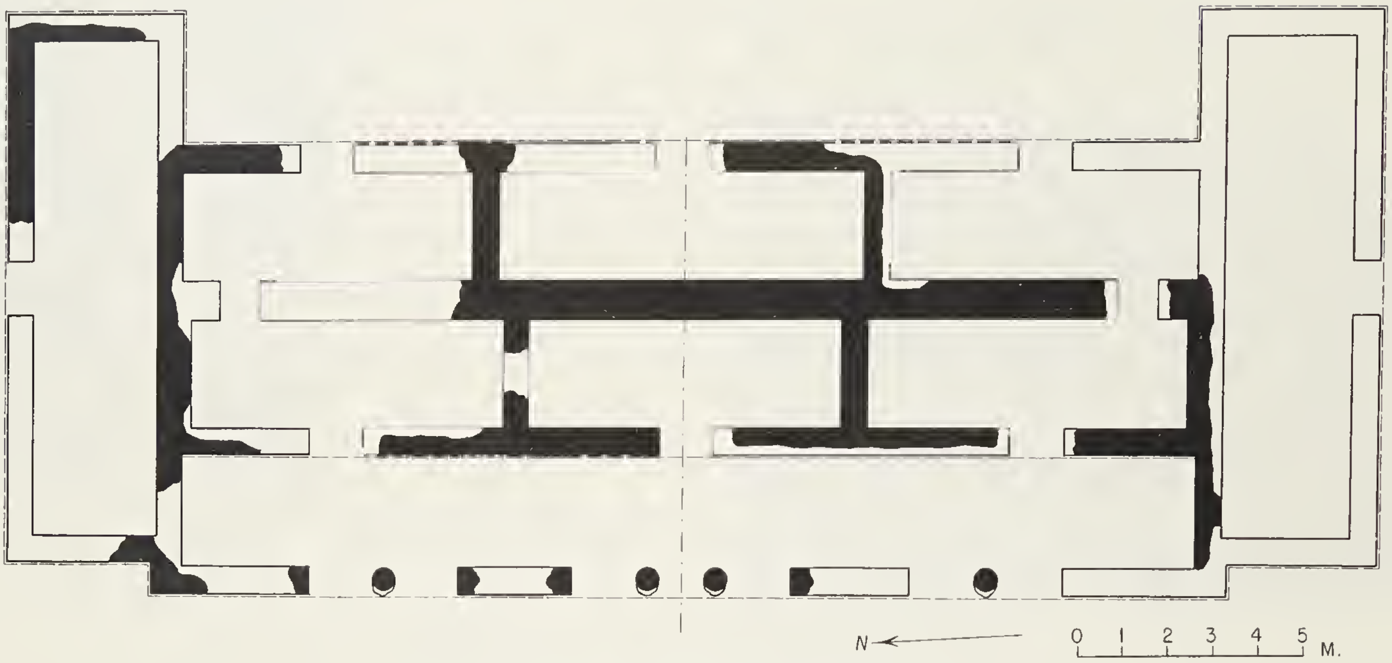


Figure 519. Oxkintok. Plan of Structure 3C7.

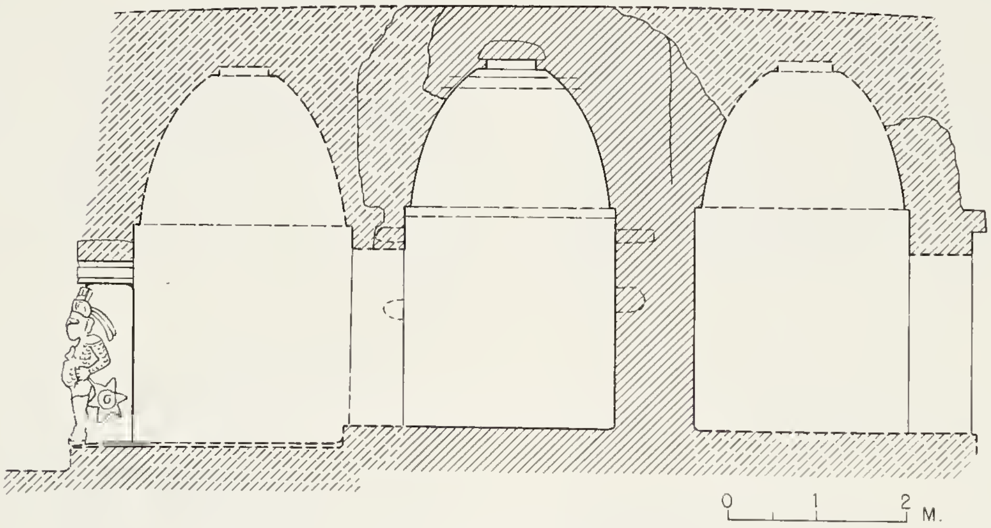


Figure 520. Oxkintok, Structure 3C7. Transverse section.

inner room and at south end of south inner room where walls are .80–.85 m thick.

No outer wall facing observed. Inner wall masonry typically Puuc of good but not highest quality (fig. 521).

Doorways. Large, well-cut and dressed, full-width jamb stones. Stone lintels, the one over east central doorway carved (see Decoration, below). Columnar doorways in western facade. Unusual arrangement of central doorway with pair of columns flanked by doorways, each with single column (fig. 519). Columns carved in high relief and support carved capitals (fig. 520; and see Decoration, below). Probably were corbels at tops of jambs although none observed.

Wall Depressions. A number of niches in central inner room located about 1 m from ends of room. Rectangular openings of niches run about .20 m on a side and depressions are .25–.40 m deep (fig. 520). Inner surfaces are smoothly plastered.

No cordholders observed but probably once were present.

Vaults and Beams. Typical Puuc vaults built of well-cut and faced semispecialized stone (fig. 521). Soffit slopes are arched; offset at spring carries across ends of rooms; there are small offsets or corbels below capstones (fig. 520). Rough masonry face, subsequently buried, at each side of central vault (figs. 520, 521b) shows that that vault

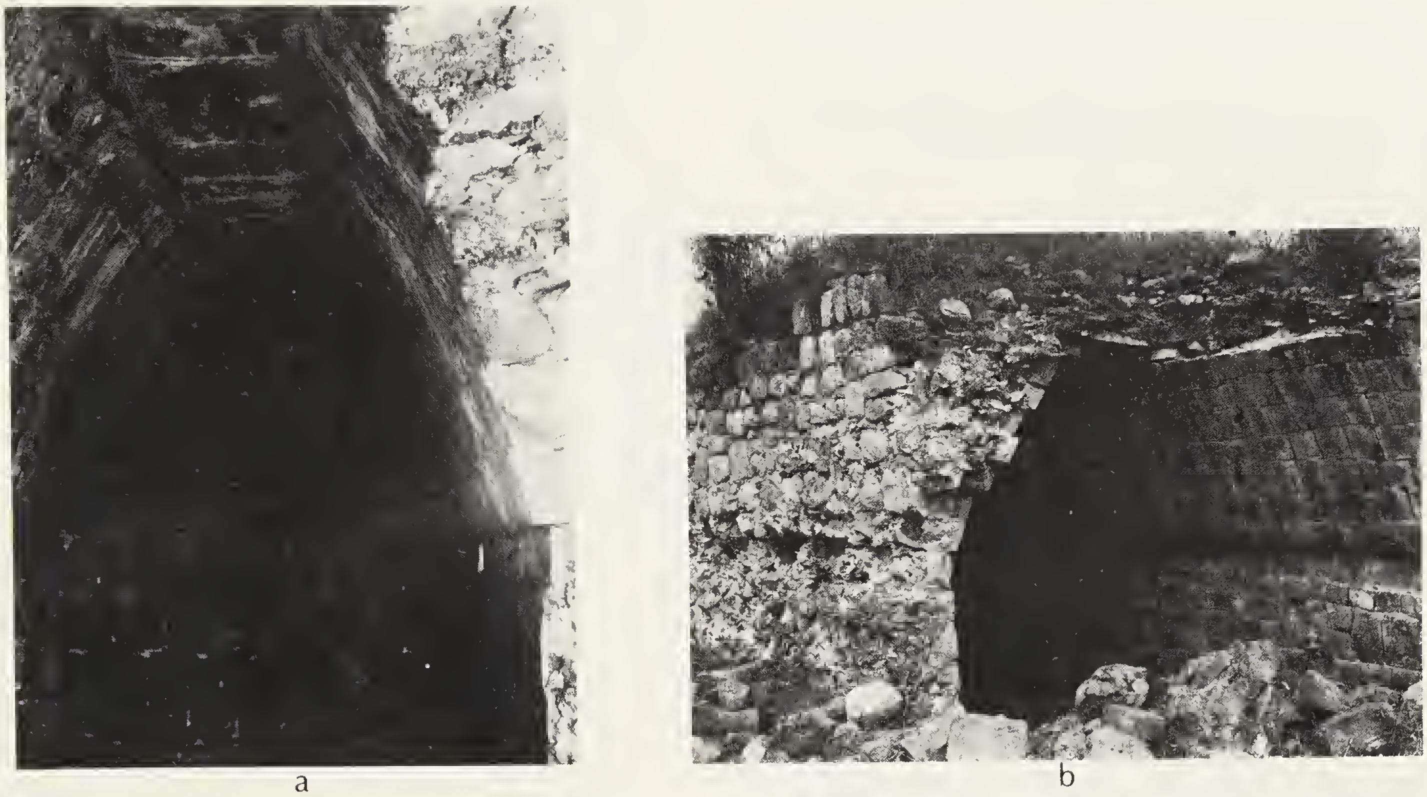


Figure 521. Oxkintok, Structure 3C7. Wall and vault masonry: a, central room, looking south; b, south central room looking northeast.

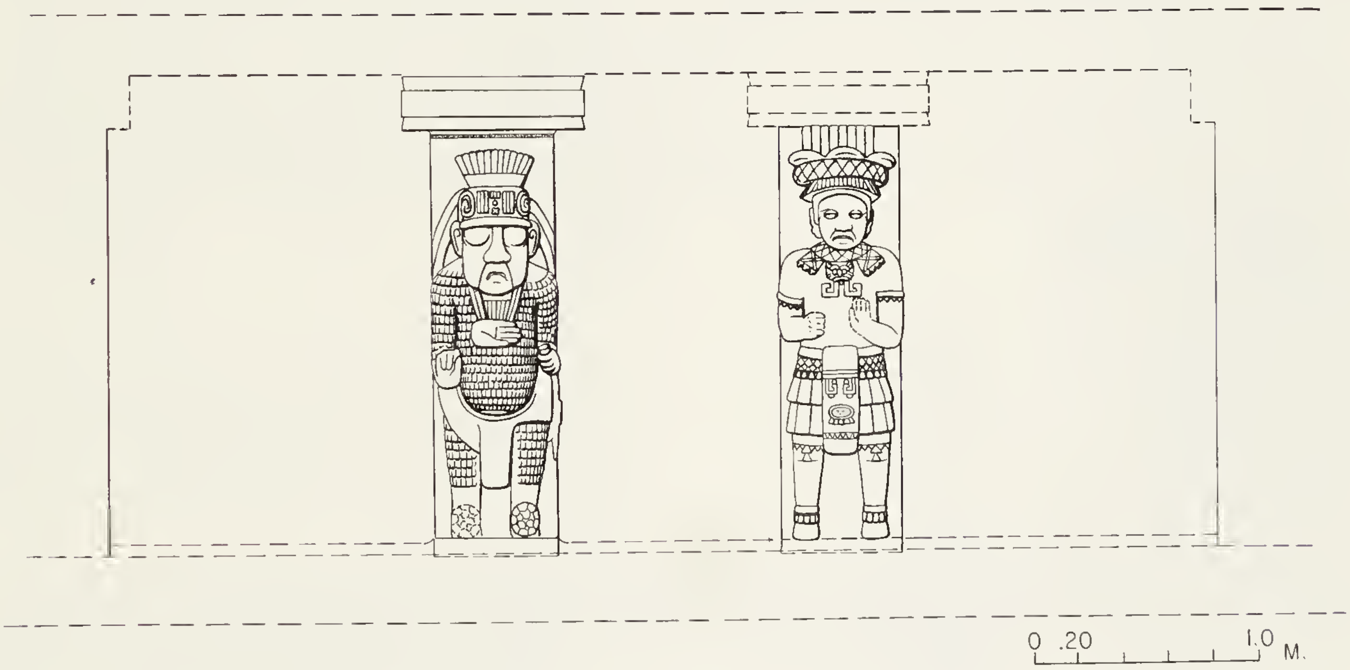


Figure 522. Oxkintok, Structure 3C7. Restored elevation of west central doorway.

was erected prior to others in the course of building Structure 3C7.

Beam sockets just below spring of vault and short distance below capstones in inner rooms. No record of beams in other rooms.

Moldings. Single member of medial molding with very slight batter preserved at rear (east) of building (fig. 520). Do not know if there were other members. No trace of cornice molding.

Roof. Roof cap preserved over central vault. Normal construction; .60 m thick from underside of capstones to upper surface of roof.

Decoration. Columns in doorways in western facade carry sculpture of human figures carved in high relief (fig. 522; and see Proskouriakoff 1950, pp. 167–168, figs. 96f, g and 97). Only lower half of column in north doorway discovered. One capital, carved in form of three-member molding, found in center doorway and presumably all columns carried such capitals. No corbels from top of jambs uncovered, but probably were used, and may have been of three-member molding design similar to capitals.

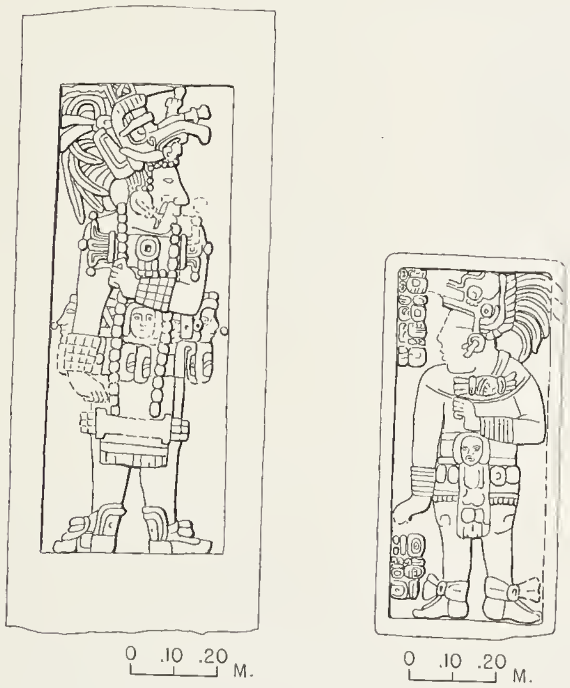
Lintel of central eastern doorway sculptured with low relief, elaborately costumed human figure (fig. 523a; and ibid., pp. 167–168, fig. 96e).

Carved tablet, which may have been a wall panel, or less likely a capstone, found under debris in south doorway in western facade. Low-relief sculpture of human figure and two columns of hieroglyphs (fig. 523b; and ibid., pp. 167–168, fig. 96d).

E. M. Shook's field plan of Structure 3C7 and his diary (1940) make note of a carved capstone in the central inner vault. There is no drawing, photograph, or description of the sculpture (but see Mercer 1896, p. 63).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

No secondary construction, other than the floor in the west room, was observed. The building is much fallen, however, and the only excavation performed was to uncover the sculptured columns. It is entirely possible that more thorough exploration will uncover a building sequence not perceived by us. Plan of structure suggests that present front (west) wall with its multiple entrances was added to an earlier building, thus forming the long western gallery.


0 .10 .20 M.
0 .10 .20 M.

Oxkintok M.S.S. 30

a b

Figure 523. Oxkintok, Structure 3C7. Decoration: a, carved lintel from east central doorway; b, carved tablet from debris in west southern doorway.

Structure 3C8

Sculptured human head of stone tenoned into first course of medial molding or into course just below molding on main (west) facade. No description or photograph of sculpture and no details of building in our notes.

Structures 3C9, 10, 3D1

See Other Groups, Structures 2C1, 3C9, 10, 3D1.

SOUTH GROUP

(Structures 3B5–7)

Known locally as *Xanpool* (meaning obscure, but possibly *xan,* guano palm, *pol,* head), the South Group rests on a low natural limestone hillock and looks north across the North Plaza to the North Group (fig. 477). As already explained, the group forms the southern end of the principal north-south axis of the city (see Civic Plan, above) and the main approach is clearly from the north, toward which the large pyramid temple faces that dominates the group. The plan of the group is formal and carefully arranged, a central court or plaza leading by ascending levels to the great temple and flanked by large platforms upon which rest lesser structures. Only Structure 3B5 is in any state of repair. Some of the small low platforms probably represent the remains of dwellings.

Surprisingly, no monuments were observed in the South Group. An isolated piece of sculpture, M9 (see Miscellaneous Sculpture, below), was found a short distance south of Structure 3B5.

Structure 3B5

Best preserved example of crude construction that typifies presumably early style of architecture at Oxtintok. Building seems originally to have faced east, but the entrance on that side was later blocked by secondary construction.

SUPERSTRUCTURE

Plan. See figure 524a.

Sections. See figures 524b, 525.

Elevation. See figure 526. Largely restored.

Base Molding. Seems to have been no molding at base of walls.

Floors. Complicated system of building levels and finished floors (figs. 524b, 525a). Two lowest strata shown in section are building levels. Walls of building rest on upper of these two strata. Original finished floor .15m above outside floor at west, but slopes to outside floor level at east. Later secondary floor .15–.20 m above original floor observed in and around east doorway but not seen elsewhere. Floor may rise to inner north and south rooms (fig. 525b), but not certain.

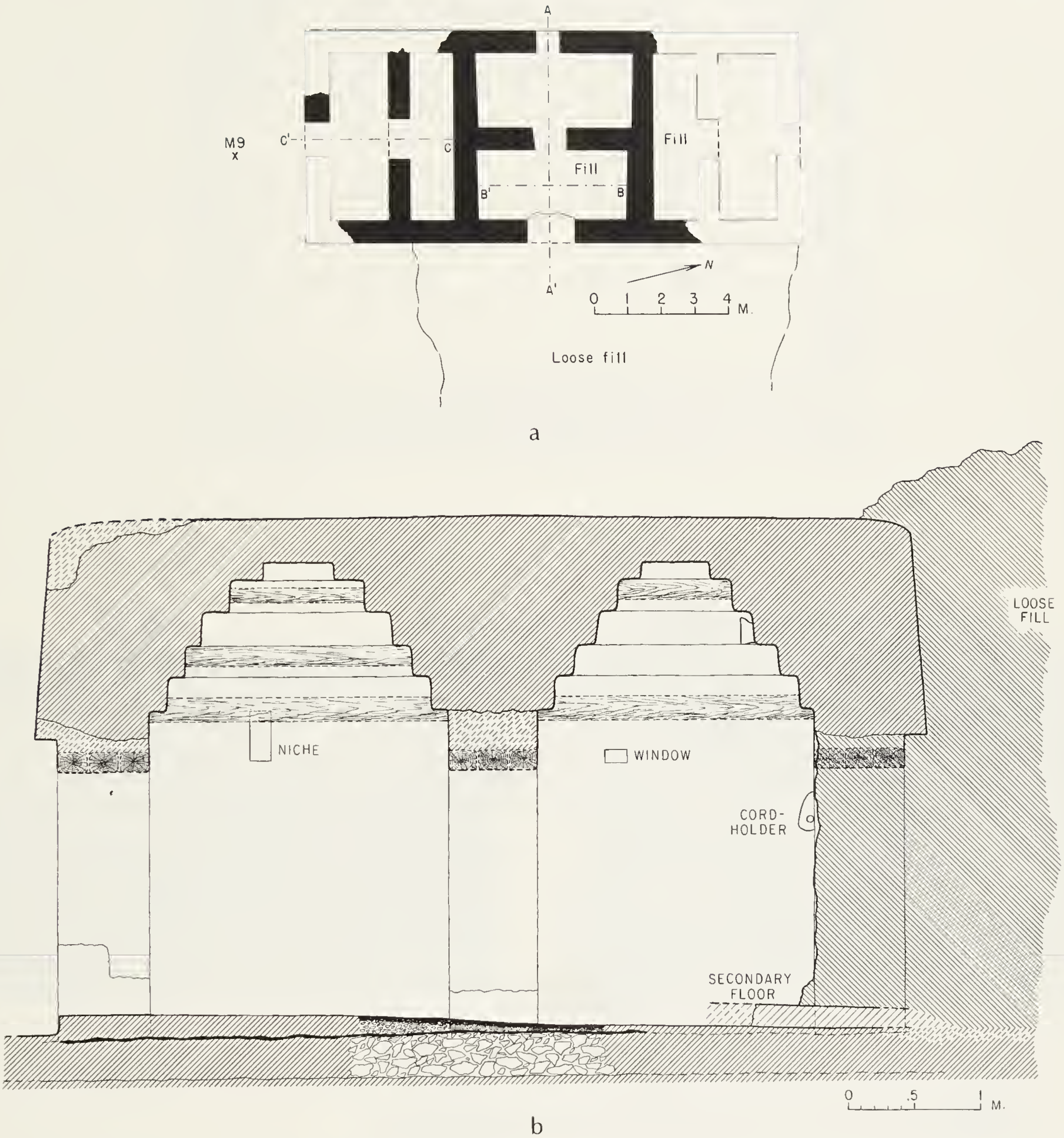


Figure 524. Oxkintok, Structure 3B5: a, plan; b, transverse section (A–A').

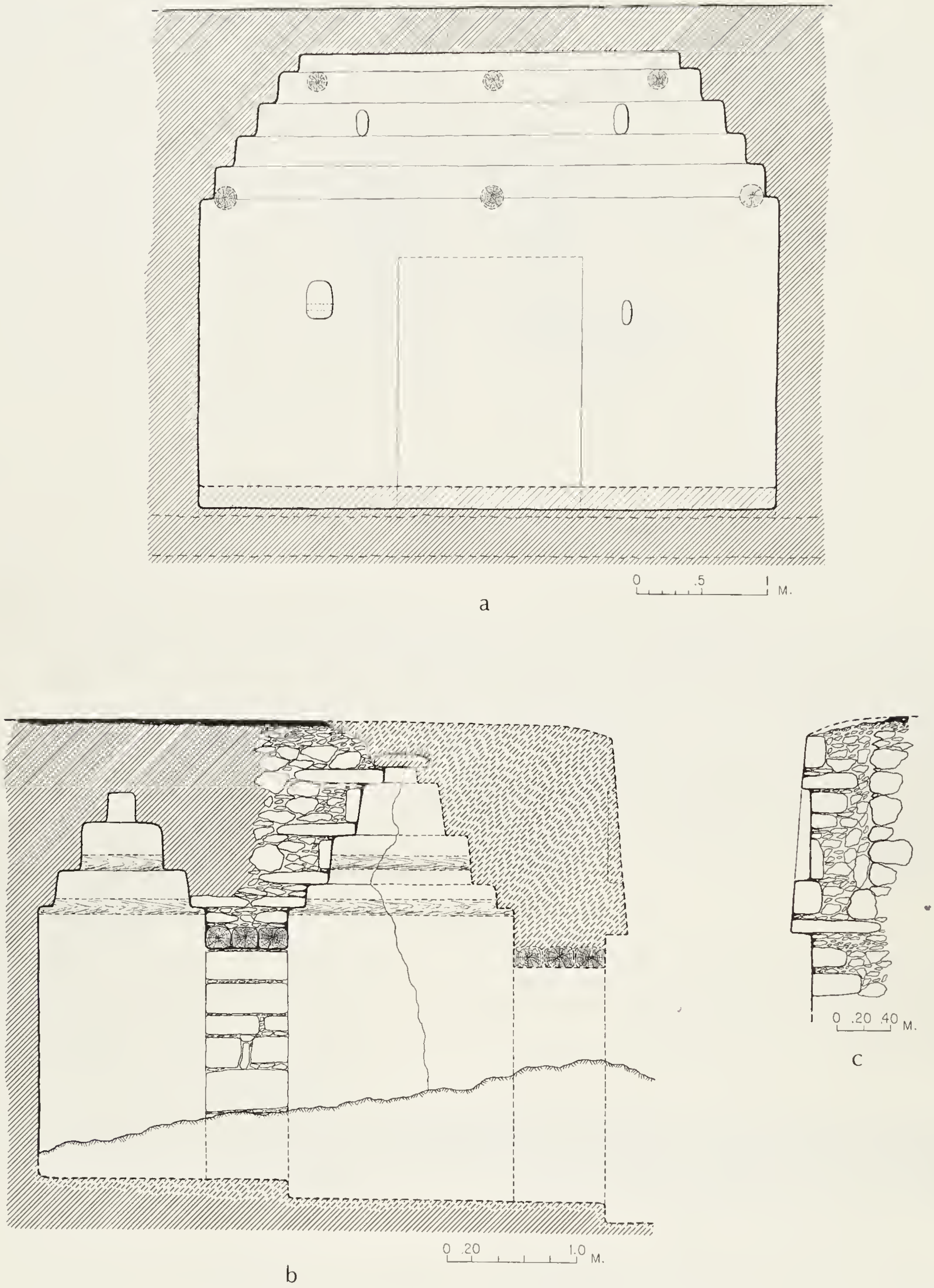


Figure 525. Oxkintok, Structure 3B5: a, north-south section (B–B′); b, north-south section (C–C′); c, detail section of upper facade at west.

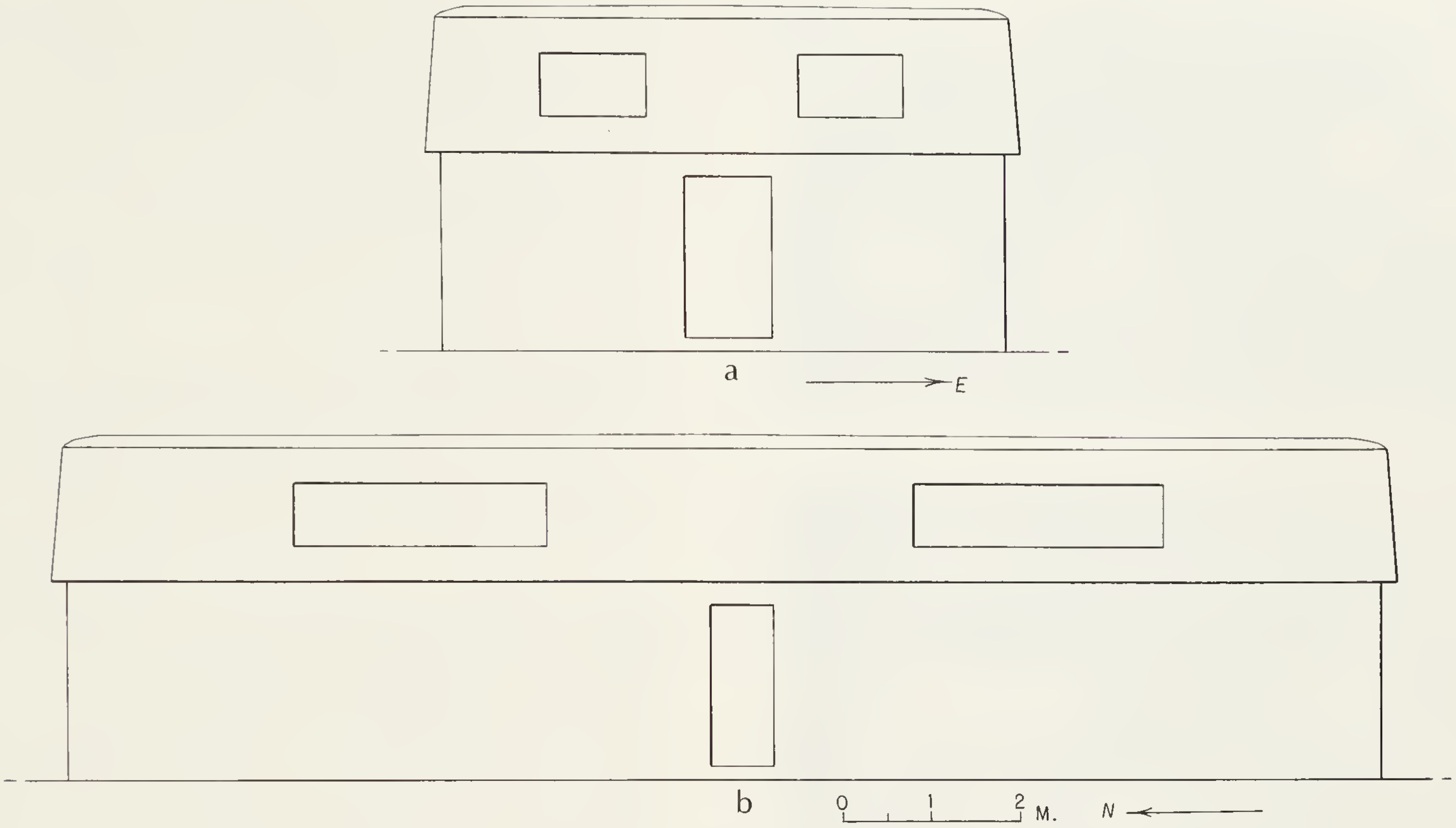


Figure 526. Oxkintok, Structure 3B5: a, restored south elevation; b, restored west elevation.

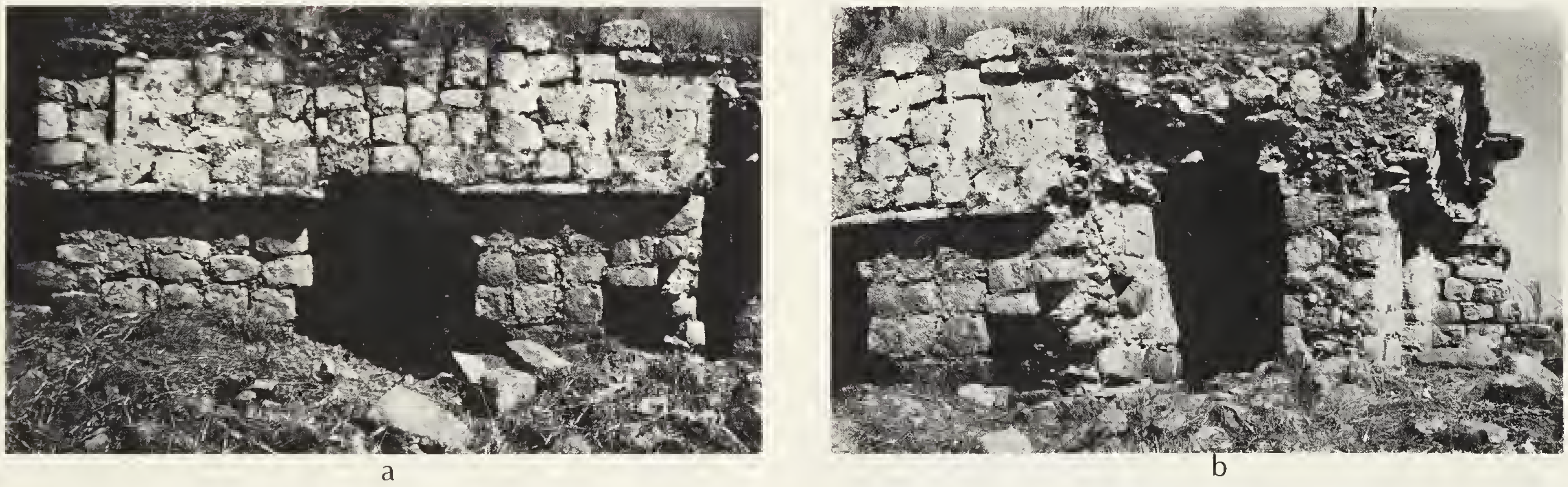


Figure 527. Oxkintok, Structure 3B5: a, standing central part of west facade, looking east; b, fallen west ends of south rooms, looking east, and showing medial wall in section.

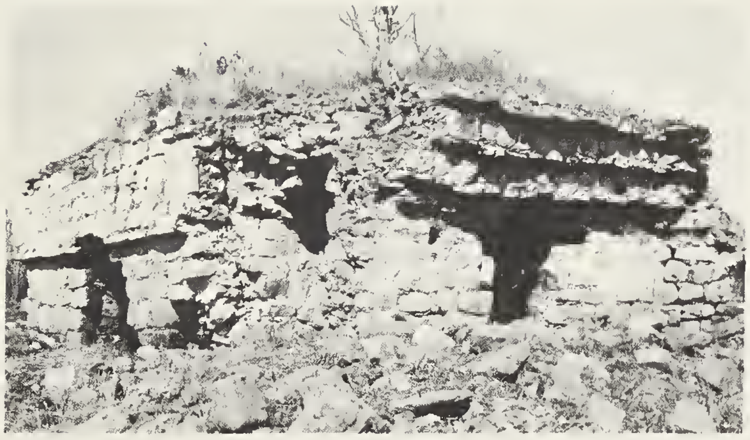
Walls. Roughly cut and faced block masonry (figs. 527, 528) layed with many spalls and with hearting of small stone and lime concrete (fig. 527b) quite like masonry of Structures 1B1, 3B1, and 3C5, 6 (see above). Walls run about .65–.75 m thick.

Doorways. Jambs a combination of full-width stones and smaller stones faced on two sides like corner wall stones (fig. 525b). Stone roughly shaped and faced like that in walls, but full-width jamb stones seem to foreshadow later Puuc construction.

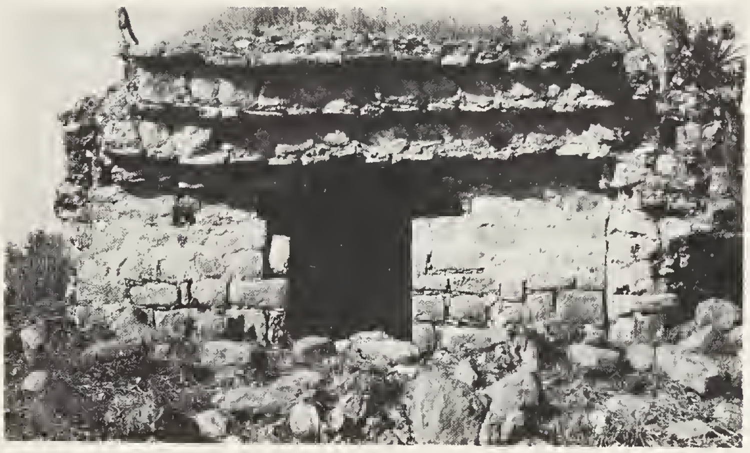
Wooden lintels. Decayed remnants of three beams over inner south doorway still present.

Wall Openings, Depressions, and Projections. Rectangular windows, niches, ring-type cordholders, and pegs or tenons that may be forerunners of cordholders in form of foot in Puuc buildings (figs. 524b, 525a, 528, 529).

Vaults and Beams. Stepped vaulting that superficially looks like vaults in Structures 1B1 and 3B1 (see above) but in fact is constructed differently. Most of steps or corbels are formed by long, deeply tailed-in slabs that support at



a



b

Figure 528. Oxkintok, Structure 3B5: a, west facade and north side of south room, looking northeast; b, north side of south room, looking north.

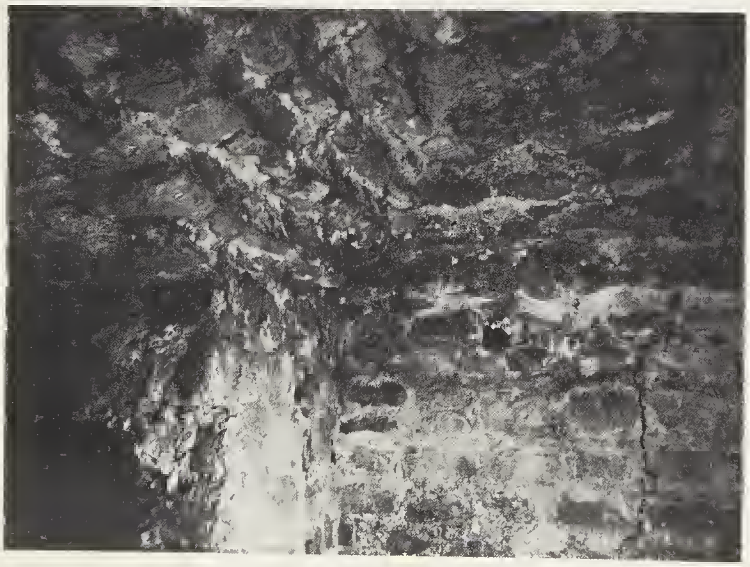


Figure 529. Oxkintok, Structure 3B5. South end of west room, showing wall and vault masonry.

their exposed ends thin, almost tilelike stones, set vertically to form major part of face of step (figs. 525b, 528). Ends of vaults stepped inwardly same as sides (figs. 525a, 529). Very rough masonry face behind upper facade of building (fig. 525c) shows that vaults were completed first, and upper facade erected later.

Two dressed stones suspiciously Puuc–like in workmanship still in place near top of vault of inner north room. Difficult to explain but may have to do with secondary construction (see below).

Beam sockets show at level of spring of vaults and in a variety of patterns higher in vaults (figs. 524b, 525a, b).

Moldings. Strictly speaking, entire upper facade is a heavy apron molding decorated by inset panels (figs. 526, 527, 528a). Above and below the panels, where they occur, are what we normally think of as medial and cornice moldings (fig. 525c). They are constructed like the medial molding of Structure 3C6 (fig. 513a), but carry a slight batter rather than being rectangular.

Roof. Plaster surface preserved in places. Usual construction of small stone and mortar surfaced with pure lime plaster (fig. 525b, c). Roof cap surprisingly thin, at places .35 m from underside capstones to upper surface roof.

Decoration. Inset panels in upper facades (fig. 526) and traces of red paint on walls below overhang of upper zone only decoration observed.

Sculpture M9 (see Miscellaneous Sculpture, below), which once had a tenon at the back, may well have come from Structure 3B5 but cannot be certain.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Huge pile of loose rock on east side of building. Pile stands to height of roof and blocks east doorway. East room and inner north room partially filled with loose stone and may once have been totally filled. This secondary construction, which seems never to have been completed, indicates that building was to be covered and built over or addition, probably in form of second story, was to be constructed. It is conceivable that the well-dressed stones near the top of the vault of the inner north room were in some way connected with the secondary filling of that chamber (see Vaults, above). There are ample traces of Puuc remains in the vicinity of Structure 3B5 and one can surmise, but not be certain, that the secondary construction described above is of that period.

The late floor previously mentioned (see Floors, above) is the only other secondary building operation observed here.

Structure 3B6

Great pyramid, possibly the largest at the site, that faces north, from which side it was approached by a series of ascending terraces (fig. 477). Sides of pyramid very steep and badly fallen. Fragmentary remains of temple building at summit seem to be of early period at Oxkintok.

Structure 3B7

Almost totally collapsed building of Puuc-style masonry. No architectural details visible.

OTHER GROUPS

(Structures 2C1, 3C9, 10, 3D1)

On the eastern and southeastern periphery of the central part of the city lie a scattering of architectural groups that seem to bear only casual relation to the main ruins and little relation to one another. As seen on the map (fig. 477) these assemblages start near the northwest corner of Quadrangle 2C and curve around the central groups in a sort of semicircle. The scattered, unrelated pattern is characteristic of Puuc sites and particularly of the smaller or fringe buildings at those sites.

Only the numbered structures (2C1, 3C9, 10, 3D1) in the groups in question received more than the cursory examination involved in sketch mapping. Our field notes record brief observations, however, on several of the unnumbered groups, and on two other groups that lie off the map to the south and west of the South Group.

Northwest Group in Quadrangle 2C

Group rests on high platform created by artificial terracing on natural rise. Fallen building on south side of court (fig. 477) contained highly specialized vault stones of advanced Puuc type. West building, also fallen, shows Puuc-style wall masonry and semispecialized vault stones. Near center of court is circular platform like those east and west of Structure 2B8 (see above), and at the northern end of the court is the mouth of a chultun.

Altar 5 lies at court level near the southern end of the west building and Altar 6 is just off the edge of the circular platform (see Monuments, below).

Central Groups in Quadrangle 2C

Northwestern of two groups is low platform supporting three house mounds (fig. 477).

Southeastern of these two groups consists of three fallen buildings around a court that is entered by a stairway on the south (fig. 477). Debris of buildings shows them to have been of classic Puuc style with large jamb stones and well-faced and fitted vault stones.

Group of Structure 2C1

Quite a large assemblage of buildings on a relatively high platform that probably makes use of a natural outcropping to attain its elevation (fig. 477). All but the large central building in the group are totally collapsed, but what masonry and architectural details are visible indicate that most, if not all, of the construction is of Puuc style. At the west end of the good-sized mound that forms the north side of the court in front (west) of Structure 2C1 were found three carved stones (fig. 530b) that seem to be fallen architectural decoration, possibly from a molding. In front (north) of a mound along the south side of the same court were lying sculptured mask elements (fig. 530a)—one of them the fragment of a snout—that indicated that the building carried one or more masks on its northern facade. East of this mound, and directly south of Structure 2C1, are the remains of a small building that had been decorated with the very common Puuc motif of split columns on the facade.

Just west of the group, and at ground level, is a chultun with an opening through the bedrock (fig. 530c) so small (.32 m) that one wonders how a workman could have entered (or exited!) to excavate the cistern. The stone cover of the opening was still present.

Sculpture M10 was found on the ground a short distance northwest of this group (see Miscellaneous Sculpture, below). Altar 30 lay near the southeast corner of a courtyard east of Structure 2C1, and Altar 31 was found at the foot of the talus of debris on the north side of the large platform that supports the group (see Monuments, below).

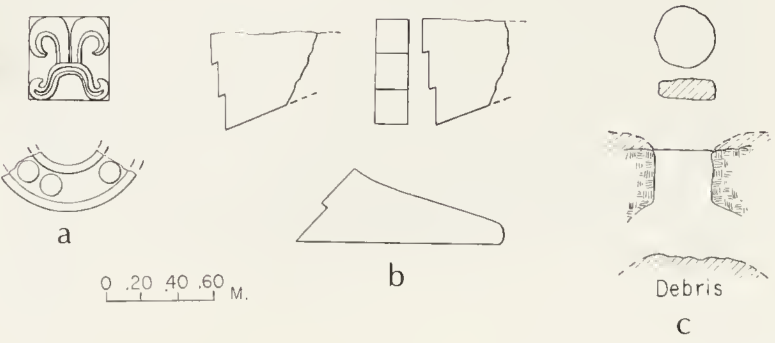


Figure 530. Oxkintok, Group of Structure 2C1: a, mask elements from mound on south side of court; b, carved stones from mound on north side of court; c, stone cover and section of opening to chultun west of group.

STRUCTURE 2C1

An unfinished building that presumably was to face west on courtyard on that side.

SUPERSTRUCTURE

Plan. See figure 477.

Construction. Entire northeast corner never completed. At least four and possibly five rooms missing. Heavy central core indicates that second story or roof structure was planned.

Style of construction and masonry typically Puuc. Arched soffit slopes, offset at level of spring of vault carried across ends of rooms, corbels beneath capstones (fig. 531), wall and vault stone finely cut, dressed, and fitted.

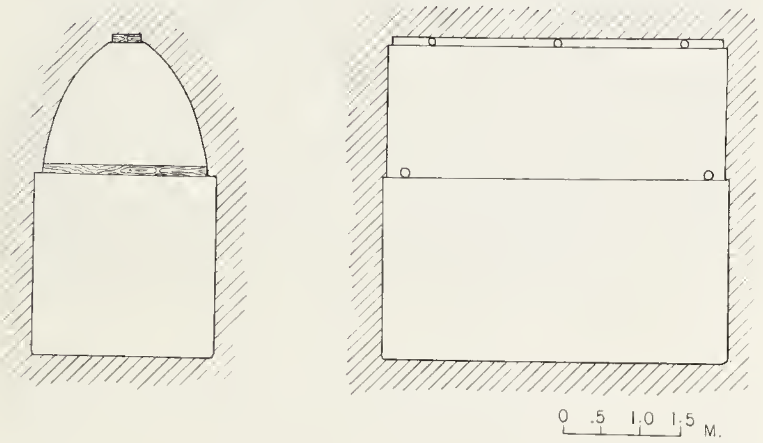


Figure 531. Oxkintok, Structure 2C1. Transverse and longitudinal sections of north room on east side of building.

Group of Structure 3C9

Small group of buildings on a low platform and arranged about a central courtyard (fig. 477). Two chultuns, the western of which is located before Structure 3C9, a fallen building of Puuc style, and is remarkably well preserved. Mouth of cistern surrounded by a stone curbing which outlined a once-plastered drainage area that sloped gently to opening (fig. 532a). Stone ring (fig. 532b) sat above mouth of chultun, and presumably once was set flush in plaster floor that formed drainage area.

Structure 3C10

Almost totally fallen building that apparently faced west on small court formed by little structure at south and edge of low platform that supports group (fig. 477). There is a wealth of sculptured stone visible in the building debris, and excavation, which was not carried out, would undoubtedly produce more.

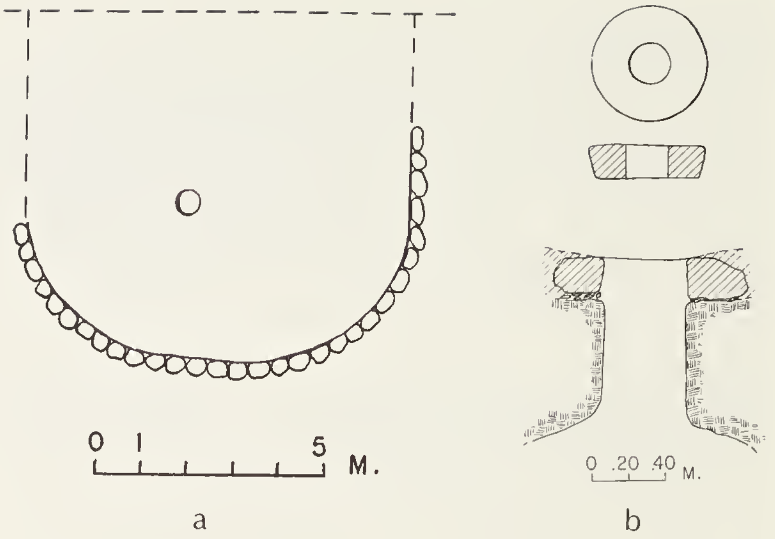


Figure 532. Oxkintok, Group of Structure 3C9, Chultun in front of Structure 3C9: a, plan of drainage area and mouth; b, stone ring and section of opening.

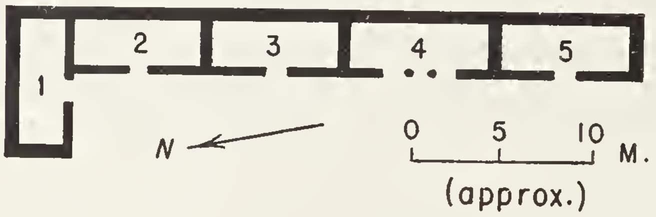


Figure 533. Oxkintok. Sketch plan of Structure 3C10.

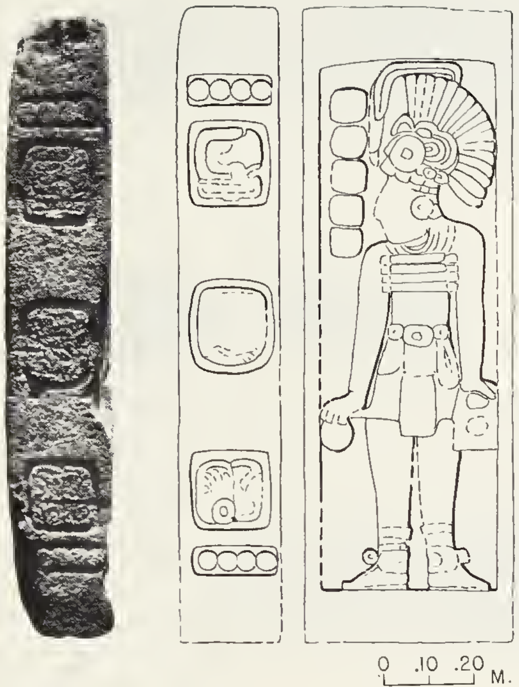
SUPERSTRUCTURE

Plan. See figure 533. Sketch plan is mainly schematic. Almost no traces of walls visible and plan is largely determined by fallen architectural elements and contours of debris.

Construction. Little visible, but full-width jamb stones, doorway columns, and quality of stone work leave little doubt that building is of Puuc workmanship. Thickness of walls at doorways .45–.50 m. Stone lintels. Doorway to Room 4 had two columns with capitals and corbels on doorjambs. Corbels probably used in all doorways. No molding intact.

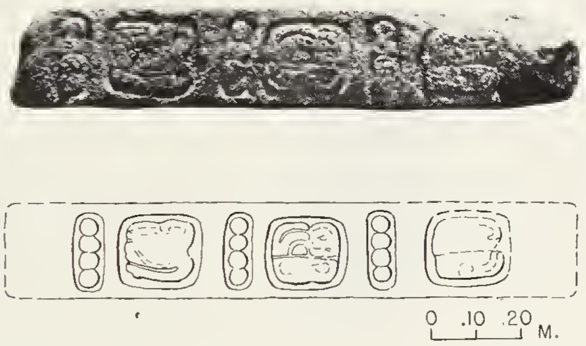
Decoration. Large amount of low-relief sculpture associated with doorways to building. Only south column of entrance to Room 4 still in place; all other sculpture fallen. All of lintels apparently carved; columns, capitals, and corbels of doorway to Room 4 sculptured; odd pieces of sculpture that may be corbels and jambs from other doorways.

Lintel from doorway of Room 1 carved with three hieroglyphs bracketed by numerical coefficient of 4 at each end on front edge, and standing human figure on underside (fig. 534; and see Proskouriakoff 1950, fig. 96b). Column of five hieroglyphs in front of face of standing



Oxkintok Lintel Str. 3C10 RM 1

Figure 534. Oxkintok, Structure 3C10. Lintel from doorway of Room 1. Front edge and underside.



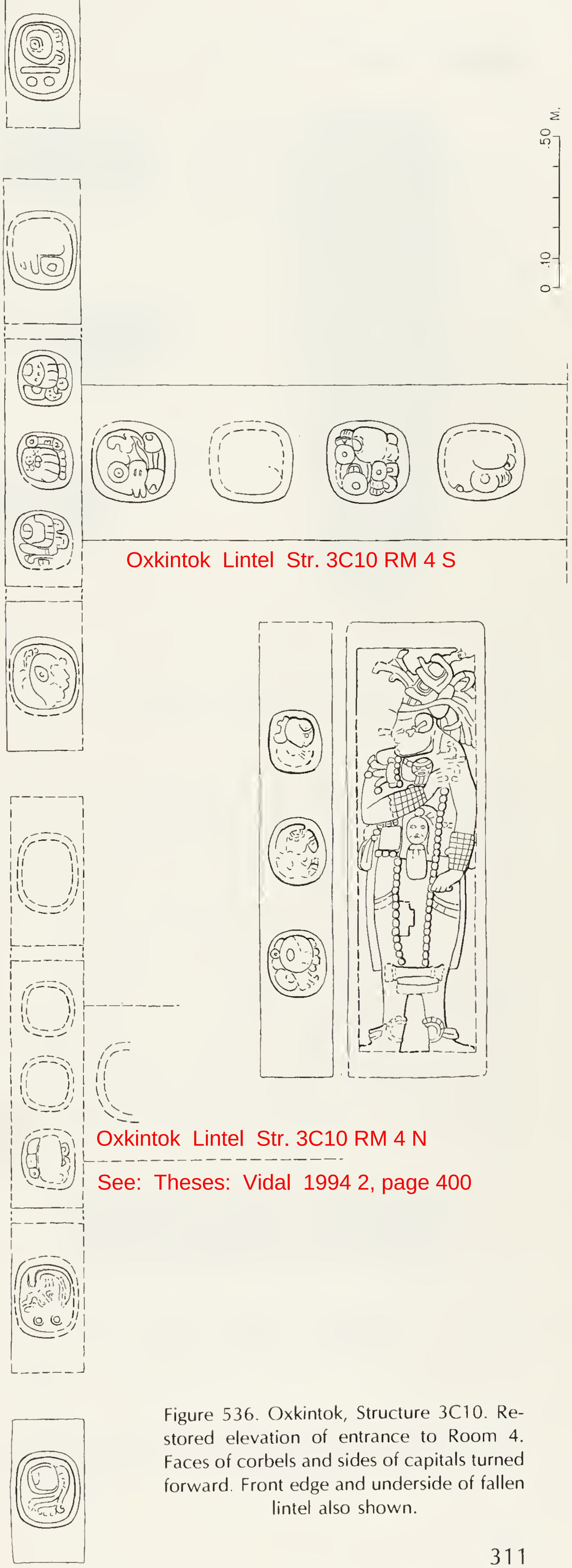
Oxkintok Lintel Str. 3C10 RM 3

Figure 535. Oxkintok, Structure 3C10. Front edge of lintel from doorway of Room 3.

figure which wears elaborate headdress and heavy pectoral that probably portrays bars or beads of jade.

Lintel from doorway of Room 3 carries three hieroglyphs on front edge with numerical coefficient of 4 before each glyph (fig. 535). Underside of lintel plain.

South column of entrance to Room 4 carved with column of four hieroglyphs (figs. 536, 537a) and missing north column presumably treated in similar fashion. Capital that seemingly rested on south column carries three glyphs on front and one on each side (figs. 536, 537b). Fragment of other capital, only the northern end found, suggests similar treatment (figs. 536, 537c). Corbels resting on north and south jambs are each carved with a single glyph on the side facing the entrance (figs. 536, 537d). Only lintel from this entrance that was found seems to

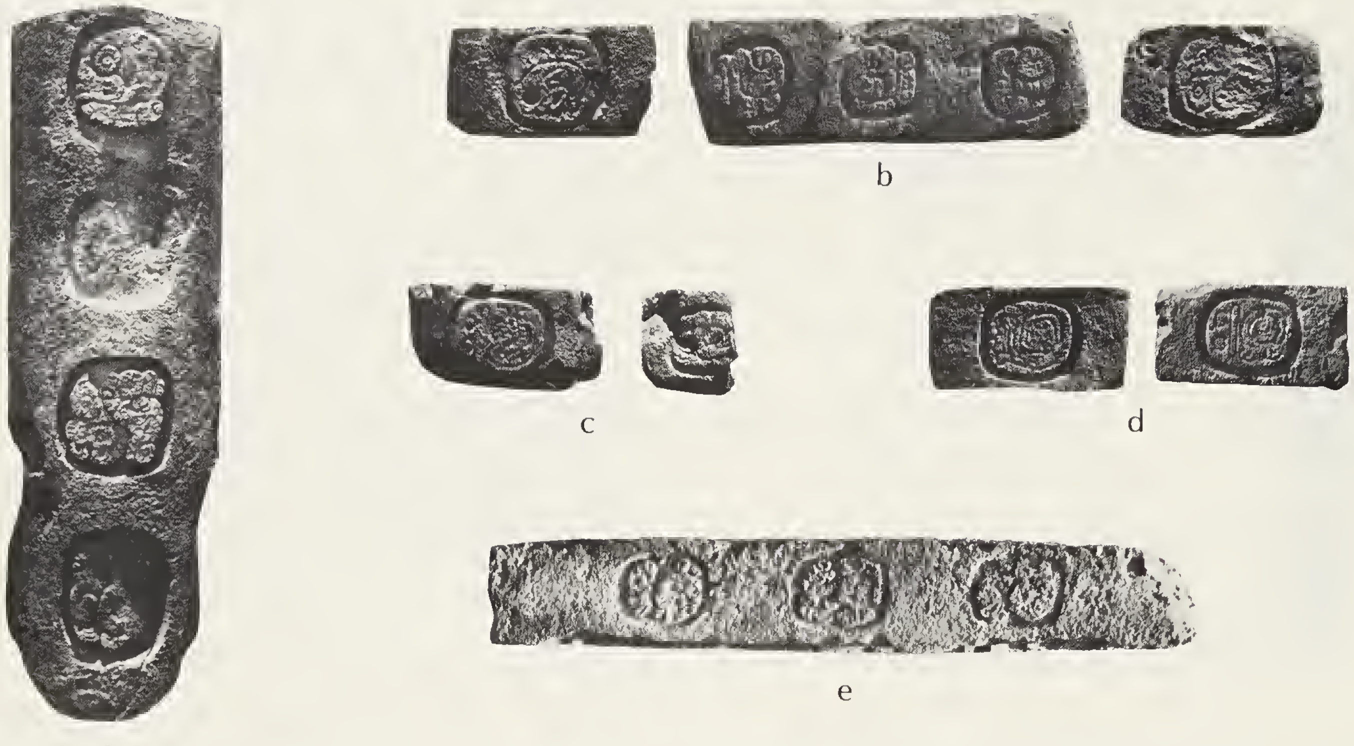


Oxkintok Lintel Str. 3C10 RM 4 S

Oxkintok Lintel Str. 3C10 RM 4 N

See: Theses: Vidal 1994 2, page 400

Figure 536. Oxkintok, Structure 3C10. Restored elevation of entrance to Room 4. Faces of corbels and sides of capitals turned forward. Front edge and underside of fallen lintel also shown.



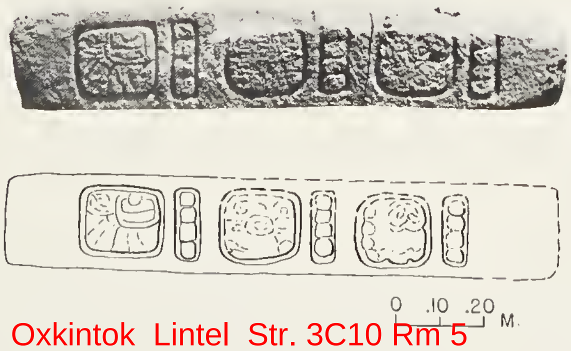
Oxkintok Lintel Str. 3C10 Rm 4 N + S

Figure 537. Oxkintok, Structure 3C10. Sculpture from entrance to Room 4: a, south column; b, front and sides of capital from south column; c, fragmentary front and side of capital from north column; d, corbels from north and south doorjambs; e, front edge of fallen lintel.

have spanned interval between columns. The front edge carries three hieroglyphs (figs. 536, 537e) and the underside shows a standing human figure with elaborate headdress and costume, distinguished by a long bead necklace terminating in a bar (fig. 536; and see Proskouriakoff 1950, fig. 96a). Beads and bar may be imagined as being of jade.

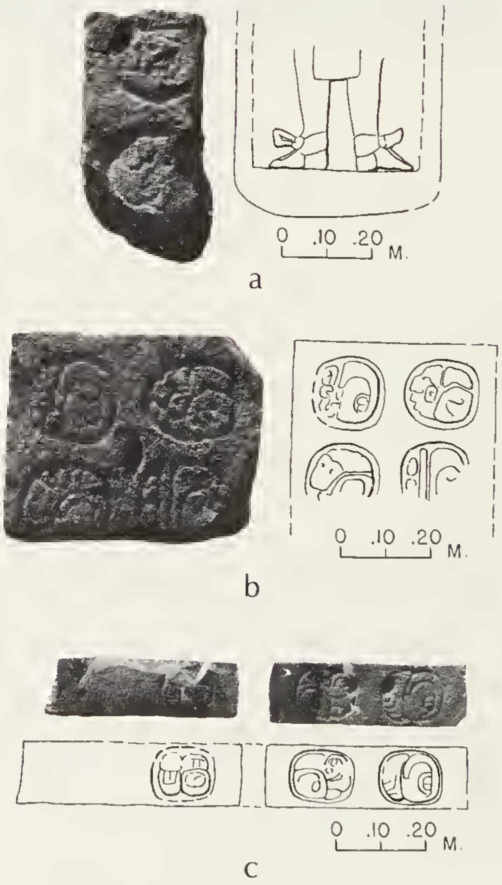
Lintel from doorway of Room 5 is like that from Room 3 with three glyphs, each with its coefficient of 4, but apparently with the coefficient following rather than preceding the glyph (fig. 538).

Several pieces of sculpture that cannot be assigned to a specific doorway are the fragment of a jamb or lintel with hieroglyphs on the front edge and the feet and legs of a human figure on the face (fig. 539a; and ibid., fig. 96c), the



Oxkintok Lintel Str. 3C10 Rm 5

Figure 538. Oxkintok, Structure 3C10. Front edge of lintel from doorway of Room 5.



Oxkintok Lintel Str. 3C10 Frags

Figure 539. Oxkintok, Structure 3C10: a, front edge and face of fragment of jamb or lintel; b, face of fragment of jamb or lintel; c, front edge and side of corbel.

fragment of another jamb or lintel with glyphs on the face (fig. 539b), and a corbel that must have topped the left jamb of a doorway and that carried a single glyph on the outer face and two glyphs on the side facing the doorway (fig. 539c).

Structure 3D1

Partially standing building in a group of otherwise completely fallen structures (fig. 477). Group seems to represent two periods of construction, Structure 3D1 being of Puuc style, the good-sized mound immediately southeast of it showing traces of the early crude masonry technique.

Structure 3D1 presumably faced east on the courtyard and small structures on that side. South of 3D1 and near the edge of the platform supporting the group is a chultun.

SUPERSTRUCTURE

Plan. See figure 540.

Construction. Outer walls .65 m thick, rear walls of end rooms .80 m thick, medial wall .90 m. Wall stone with moderately well cut, faced, and fitted veneer, except in case of wall at north of east room, which is built of rough block masonry. Doorjambs made of wall and cornerstones, the west doorway employing two or three stones to attain the width of the jamb, the doorway in the medial wall three to five stones. The latter doorway has two parallel stones as a lintel. Cordholders of tongue-at-center-of-stone variety. Vaults built of semispecialized stone and with slightly curving soffits. Offset at spring of vault carries across ends of rooms and small offset or course of corbels is present beneath capstones.

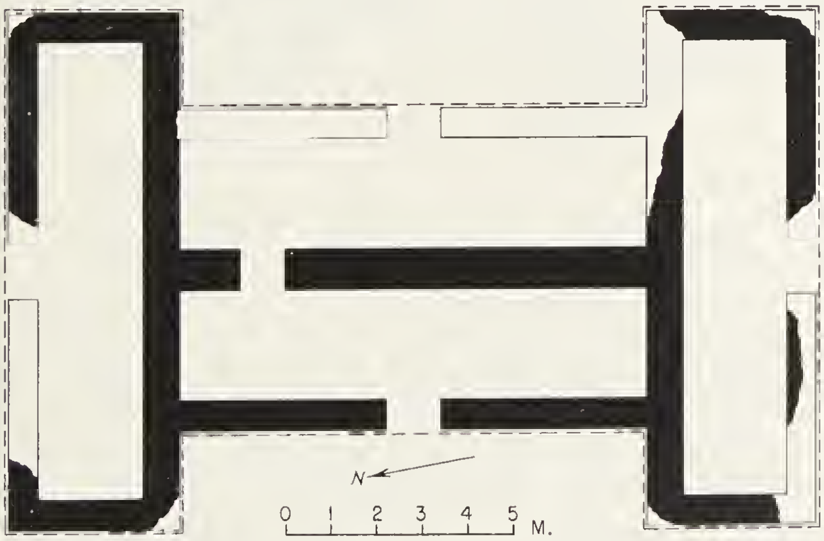


Figure 540. Oxkintok. Plan of Structure 3D1.

GROUP SOUTH OF SOUTH GROUP

Some 200 m almost due south of the South Group (Xanpool), and off the map of the site, is a small group of badly fallen buildings on the usual underlying rectangular platform. Buildings on three sides of the platform had been vaulted; on the fourth side there is a low mound and a chultun in the court near it. One of the vaulted buildings has collapsed so that large chunks of masonry remain intact and good-sized sections of the wall, vault, and roof lie scattered about the mound. The wall stones are moderately well cut, faced, and fitted, comparable to the masonry of Structure 3D1 (see above). Vault stones are semispecialized. The upper facade, a section of which is intact, shows a medial molding of two rectangular members, a vertical zone above, and a cornice molding of two rectangular members.

GROUP WEST OF SOUTH GROUP

Between 300 and 400 m west and a little north of the South Group (Xanpool), and well off the map, are some badly fallen remains that are notable mainly for a building with a second story and roof comb. A range of rooms faces north and behind it a platform, whose top is at the same level as the roof of the north range, supports a badly fallen second story with the fragment of a roof comb still standing. To the west and southwest are other fallen buildings that formed a small court with the two-story structure. All masonry and stone work observed seemed to be of Puuc style.

MISCELLANEOUS SCULPTURE

M1. Crude stone sculpture in full round that apparently portrays male human figure, the genitals being prominently displayed (fig. 541a). Badly weathered and broken, only legs and lower body preserved. Maximum height .75 m, maximum width .58 m, maximum thickness .36 m.

Found on surface of ground a few meters south of main stairway to North Group and just west of causeway (see fig. 477). The crude execution and phallic emphasis of this sculpture may ally it with a group of sculptures discussed by E. W. Andrews (1939; 1943, pp. 82–87).

M2. Stone carved somewhat in the shape of an apothecary jar with a decorative band of inverted taus and twined strands around the globular central section (fig. 541b). Badly weathered and broken. Height .45 m, maximum diameter .39 m. Found on surface near southeast corner of court between Structures 2B11 and 2B12 (see fig. 477).

M3. Large stone serpent head with widely gaping mouth holding seated human figure (fig. 541d). One side (left) of head uncarved. Carving on right side well

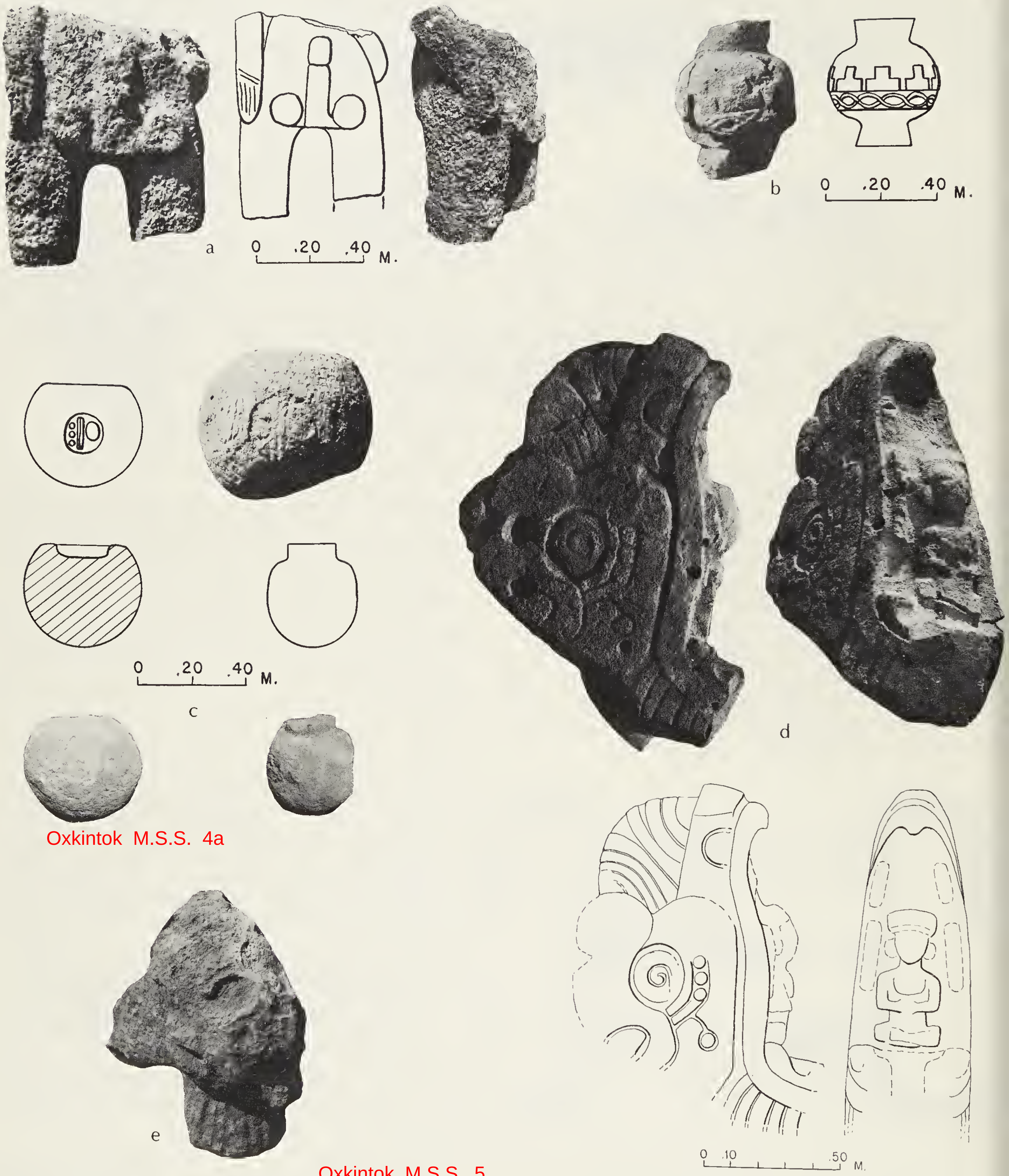


Figure 541. Oxkintok. Miscellaneous sculpture: a, M1, male human figure of stone; b, M2, carved stone; c, M4a, b, carved stone balls that may have been joined; d, M3, stone serpent head with human figure in mouth; e, M5, human or simian head of stone.

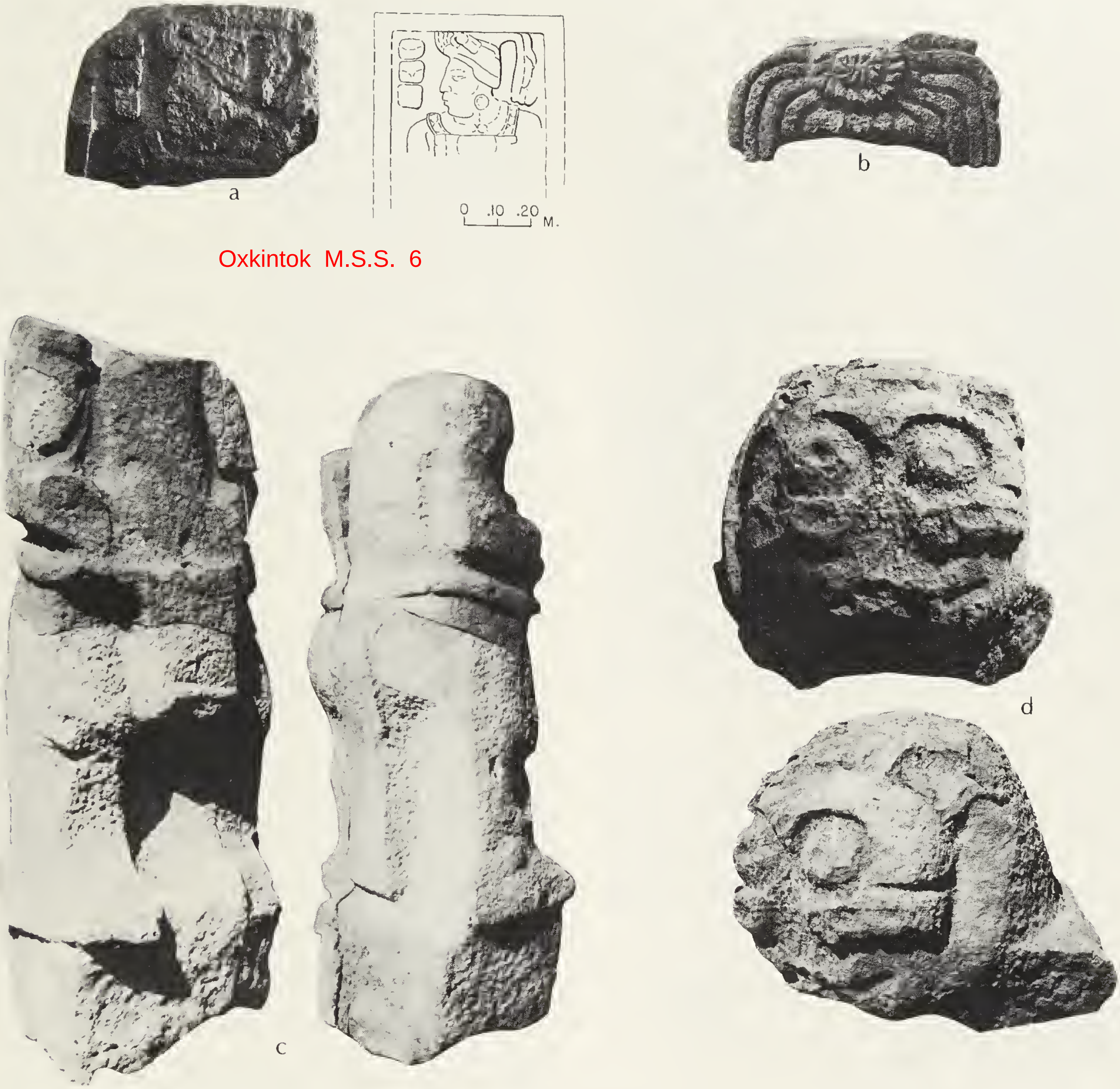


Figure 542. Oxkintok. Miscellaneous sculpture: a, M6, upper part of doorjamb (?) with low-relief carving; b, M7, stone headdress; c, M8, human figure of stone in full round; d, M9, stone head of jaguar (?).

preserved, but figure in mouth considerably weathered and part of lower jaw of serpent broken off and missing. Maximum dimension, from top of upper jaw to chin feathers approx. 1.40 m, maximum thickness at bottom .45 m.

Located on causeway west of Structure 3C4 (see fig. 477). Fragment found near Stela 23 and sculpture may originally have been nearer stelae. Lack of carving on left side of head suggests that side was hidden at original location.

M4a, b. Two stone balls, one with circular depression or socket, the other with stem or tenon, so that they may have fitted together (fig. 541c). Ball with depression has three hieroglyphs carved in low relief and equally spaced around circumference. Best preserved glyph shows member 13. Both pieces considerably weathered. Larger piece (a) has height of .38 m, diameter of .45 m; smaller piece (b) has total height of .38 m, diameter of .33 m. Found on surface in court short distance in front (north) of Structure 3C6 (see fig. 477).

M5. Stone head, apparently human or simian, with tenon at rear (fig. 541e). Sculpture badly weathered. Height .30 m, depth .38 m from nose to tip of tenon. Found on surface in court short distance in front (north) of Structure 3C6 (see fig. 477).

M6. Low-relief sculpture on rectangular stone that may be upper section of doorjamb. Carving shows head and shoulders of human figure facing to observer's left (fig. 542a). Column of three small hieroglyphs in front of figure's face. Carving badly weathered. Maximum height .42 m, maximum width .57 m. Located in building debris at north edge of mound south of Structures 3C5, 6 (see fig. 477).

M7. Stone headdress (?), probably from figure that served as decoration of some building (fig. 542b). Maximum height .23 m, maximum width .48 m, depth .15 m. Found at foot of talus from main platform just east of Structure 3B3 (see fig. 477).

M8. Human figure of stone carved in full round (fig. 542c). Head and hands of figure, which stands on pedestal, are missing. Sculpture badly cracked and broken. Maximum height 1.04 m, maximum width (at feet) .38 m, maximum thickness (at buttocks) .32 m. Located on surface near northeast corner of main platform of Structures 3B2–4 (see fig. 477).

M9. Stone head of jaguar (?). Sculpture rather crude and considerably weathered and broken (fig. 542d). Remains of tenon at rear of head. Maximum height .39 m, maximum width .40 m, maximum depth, including fragment of tenon, .39 m. Found on surface of terrace just south of Structure 3B5 (see fig. 477).

M10. Stone carved with familiar twisted-rope and pleat design (fig. 543a). May have been architectural decoration or may, when complete, have been top of two-piece column altar. Well cut and faced on top and bottom. Height .20 m. Found in debris near northwest corner of main platform supporting Group of Structure 2C1 (see fig. 477).

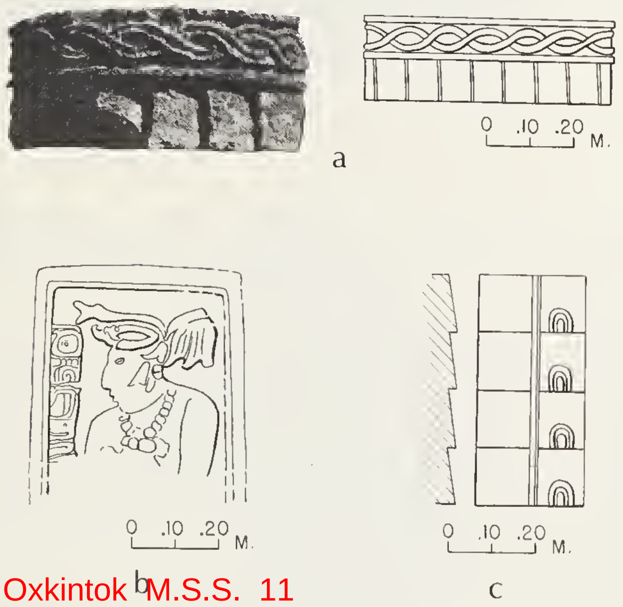


Figure 543. Oxkintok. Miscellaneous sculpture: a, M10, stone carved with twisted-rope and pleat design; b, M11, upper part of doorjamb (?) with low-relief carving; c, M12, carved stone (cf. fig. 530b).

M11. Low-relief sculpture on rectangular stone that may be upper fragment of doorjamb. Carving shows head and shoulders of human figure facing to observer's left (fig. 543b; and see Proskouriakoff 1950, fig. 95h). Column of hieroglyphs in front of figure's face. Carving somewhat weathered but in better condition than M6 (which see, above). Maximum height .47 m, maximum width .49 m, maximum thickness .28 m.

Found in debris of mound southeast of Structure 3C7. I cannot identify the mound or locate precisely the sculpture on the map. This piece has been described by Proskouriakoff (ibid.) as the fragment of a jamb from Structure 3C11. Since I cannot identify that structure on the map, and have no notes on its features, it seems to me better to classify the piece as miscellaneous sculpture (M11).

M12. Carved stone, possibly from architectural molding (fig. 543c; and cf. fig. 530b). Length .39 m, height .24 m. Built into wall of Oxkintok hacienda.

MONUMENTS

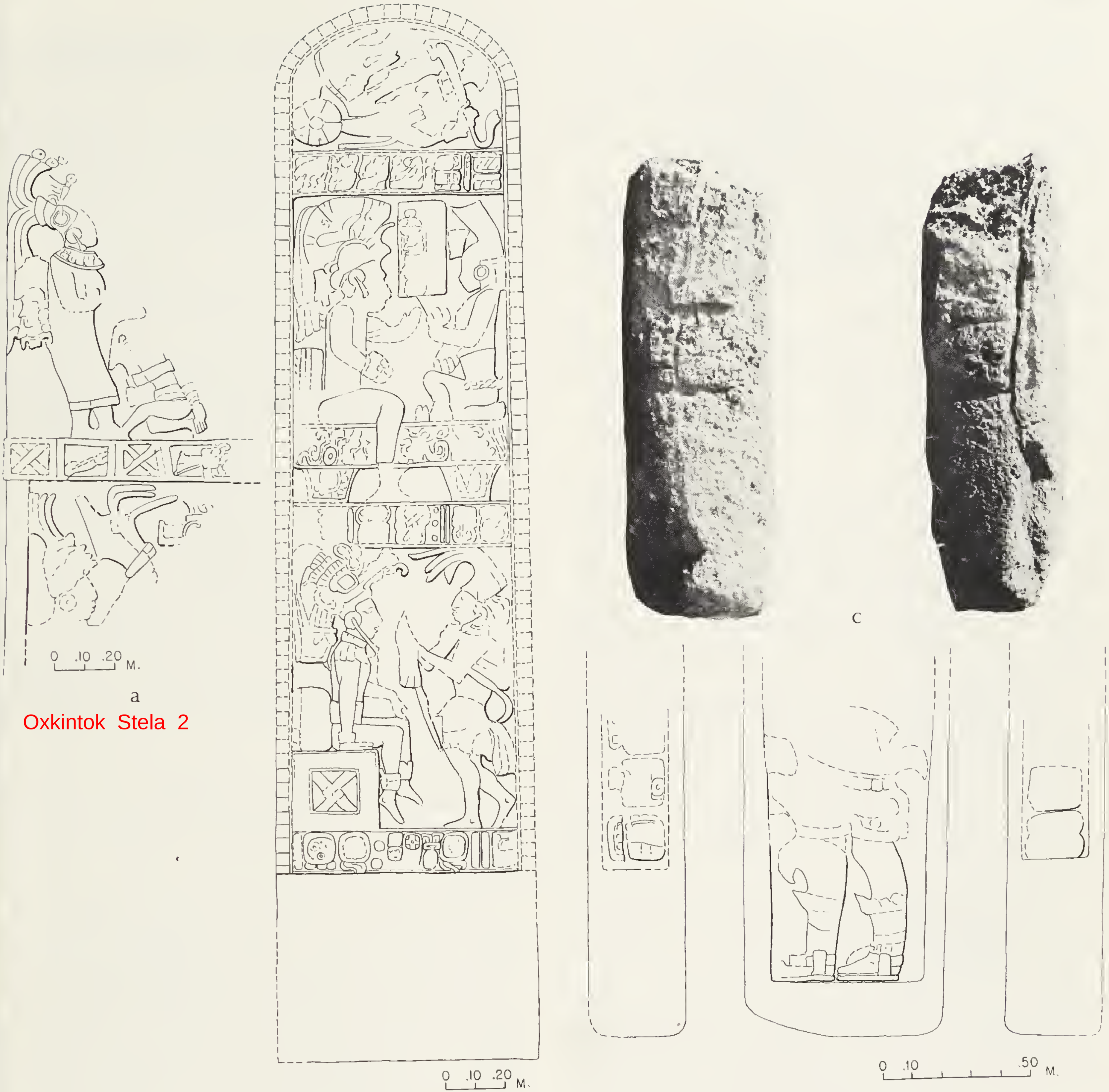
STELAE

Twenty-five stelae have been identified at or from Oxkintok. Twenty-three of these (4–26) were observed at the site; two (2, 3) are in the Museum of Archaeology in Merida, Yucatan; and another (19) is represented by fragments both in the museum and at the site. Nineteen of the stelae are sculptured; six appear to have been uncarved. One stela (4) is located in the North Group; all the rest that are still at the site (5–26) are in the North Plaza, the South Plaza, or in courts of the Central Groups (fig. 477).

So-called Stela 1, listed by Morley (1937–38, 4:375, 419) as being in the museum in Merida and coming from Oxkintok, is incorrectly identified. The monument is actually Stela 2 from Dzilam, or Silan (see Proskouriakoff 1950, p. 158 and fig. 82e). The error seems to have come about through the transposing of provenience on the museum labels of Specimens 10 and 13 (see Morley 1937–38, pp. 262–263, 419). Specimen 10, which is a part of Stela 19 from Oxkintok, is labeled as coming from Temax, whereas Specimen 13, which is Stela 2 from Dzilam (or Silan), is labeled as coming from Maxcanu. Since the specimen (10) that Morley incorrectly lists as Stela 2 from Silan is actually Stela 19 from Oxkintok, and the specimen (13) he incorrectly listed as Stela 1 from Oxkintok is actually Stela 2 from Dzilam (Silan), there is no Stela 1 from Oxkintok. As the enumeration of stelae on the published map of the ruins (Shook 1940) assumed the existence of Stela 1, and many of the monuments have been so enumerated in publications, I do not renumber the whole series here, but simply call attention to the nonexistence of Stela 1.

Stela 1. No such monument (see above).

Stela 2. Carved (fig. 544a; and see Proskouriakoff 1950, fig. 87c). Fragment is 1.70 m high, .85 m wide,


0 .10 .20 M.
0 .10 .20 M.
0 .10 .50 M.

a
Oxkintok Stela 2

b
Oxkintok Stela 3

c
Oxkintok Stela 4

Figure 544. Oxkintok. Stelae 2–4: a, Stela 2; b, Stela 3; c, Stela 4, front and sides.

.35 m thick. In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Badly defaced and weathered fragment of a stela. Broken into a number of pieces with bas-relief representing a standing personage and another seated in the upper part above a band of crosses and other motifs. In the lower part are traces of heads with feather headdresses. Maximum height 1.67 m, maximum width .85 m, maximum thickness .37 m. Oxkintok."

Sculptured horizontal band carried onto sides of stela, but otherwise sides are not carved. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)

Stela 3. Carved (fig. 544b; and ibid., fig. 87a). Height 3.50 m, width .87 m, thickness .30 m. In Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Monolithic stela broken into several pieces. Weathered and partly restored. Several scenes divided by hieroglyphic bands. Upper part defaced.

Height 3.48 m, maximum width at the base .87 m, maximum thickness at the base .32 m. Oxkintok."

Elongated standing human figure 1.77 m high on left edge of stela. Right edge badly weathered. (See Proskouriakoff 1950, p. 161, for discussion of sculpture and tentative date of 10.1.0.0.0—A.D. 849.)

Stela 4. Carved (fig. 544c; and ibid., fig. 86e). Fragment is 1.23 m high, .68 m wide, .33 m thick. Standing at foot of stairway of Structure 1B2 and facing south (see fig. 481). Altar 2 and small ceremonial platform or altar platform in front of stela.

Upper part of monument broken off and not found. Carving on remaining portion badly weathered. Front shows legs and feet of standing human figure facing to left (ibid., pp. 110, 161). Sides of stela carved with hieroglyphs, remains of three glyphs showing on left side, of two on right (fig. 544c).

Stela 5. Apparently uncarved. I have no measurements. Located at foot of stairway on east side of Structure 2B1. Altar 4 and small ceremonial platform in front of stela. I have no notes on this monument.

Stela 6. Plain. Remaining part approximately 2 m high, .76 m wide, .29 m thick. Lying just off southeast corner of small platform in front of stairway on east side of Structure 2B1. Several fragments missing and original height of monument unknown.

Stela 7. Plain. Height unknown, width .76 m, thickness .26 m. Lying at foot of talus on east side of Structure 2B2 and just north of what seems to be stairway of that structure. I have no further notes on this monument.

Stela 8. Plain. Height 1.70 m, width .86 m, thickness .48 m. Located in North Plaza a short distance west of north end of Structure 2B4. I have no further notes on this monument.

Stela 9. Carved (fig. 545a; and see Proskouriakoff 1950, fig. 87d). Height 2.60+ m, width .96 m, thickness .37 m. Located at west side of Structure 2B7, approximately on axis of large causeway that runs east from 2B7, and on axis of portal vault in Structure 2B8. Stela faced west on court of Structure 2B8. At later date Stela 9 was half buried in terrace along west side of Structure 2B7 (see fig. 488) and Altar 9 was placed on terrace in front of stela.

Lower buried part of monument beautifully preserved. Upper part broken off and badly burned and weathered. Sides and back of stela plain. Carving on front approximately .02–.035 m deep. (See Proskouriakoff 1950, p. 161, for discussion of sculpture and possible date.)

Stelae 10–14 Row of five stelae, numbered from north to south, in front of terrace on west side of Structure 2B7 (see fig. 477). All monuments fallen but presumably faced west on court of Structure 2B8.

Stela 10. Carved (fig. 545d; and ibid., fig. 88e). Sculptured fragment .39 m high, .70 m wide, .42 m thick. Plain butt of stela .75 m high, 1.04 m wide, .38 m thick. Only small fragment of carving found. Twisted-rope border and small human figure, head and feet missing, not unlike Stela 9. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)

Stela 11. Carved (fig. 545e; and ibid., fig. 88d). Height 1.95 m, maximum width .90 m, maximum thickness .30 m. Altar 10 in front of stela. Sculpture badly eroded. Carving seems to have been relatively shallow but this may be due to weathering. Sides and back of stela plain. (See Proskouriakoff 1950, p. 162, for discussion of sculpture.)

Stela 12. Carved (fig. 545f; and ibid., fig. 88b). Height 2.38 m, maximum width .58 m, maximum thickness .18 m. Stela seems to have stood on small platform. Shape of monument very irregular and unusual in that respect. Considerable erosion and apparent shallowness of carving may be due to this weathering. Sides and back of stela plain. (See Proskouriakoff 1950, p. 162, for discussion of sculpture.)

Stela 13. Carved (fig. 545b). Height 2.10 m, width .48 m, maximum thickness .30 m. Sculpture apparently covered all of front of stela except for butt. Carving too burned and eroded to discern subject. Sides and back of monument seemingly were plain.

Stela 14. Carved (fig. 545c; and ibid., fig. 86g). Maximum height .91 m, width .59 m, maximum thickness .24 m. Bottom of monument missing. Carving badly eroded and relatively shallow. Sides and back of stela plain. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)

Stela 15. Carved. Approximate height 2.40 m, width .76 m, thickness .30 m. Lying in court in front of Structure 2B12. Altar 11 seemingly rested in front of stela. Monument too burned and eroded to discern subject of sculpture.

Stela 16. Plain. Approximate height 2 m, width .85 m, thickness .28 m. Lying in court in front of Structure 2B12 and just south of Stela 15. Altar 12 apparently rested in front of Stela 16. I have no further notes on this monument.

Stela 17. Carved. Approximate present height 4 m, width .90 m, maximum thickness approx. .45 m. Height sculptured fragment (fig. 546a) .85 m. Fallen in South Plaza northeast of Structure 3B1 and just off southeast corner of platform supporting Structures 2B10–13 (fig. 477).

Long plain shaft, apparently base of monument, with small sculptured fragment at top. Trace of horizontal bar on carved piece (fig. 546a) continues on to base. Sides and back of stela plain.

Stela 18. Carved (fig. 546b; and ibid., fig. 86c). Present height 1.61 m, width .78 m. Height of sculpture on side 1.04 m, width .43 m. Fallen just south of Stela 17 (see above).

Remaining fragments constitute top of stela. Base not found. Sculpture on front too worn to make out subject. Left side shows hieroglyphs at top and head of human figure (fig. 546b). Right side and base of monument plain.

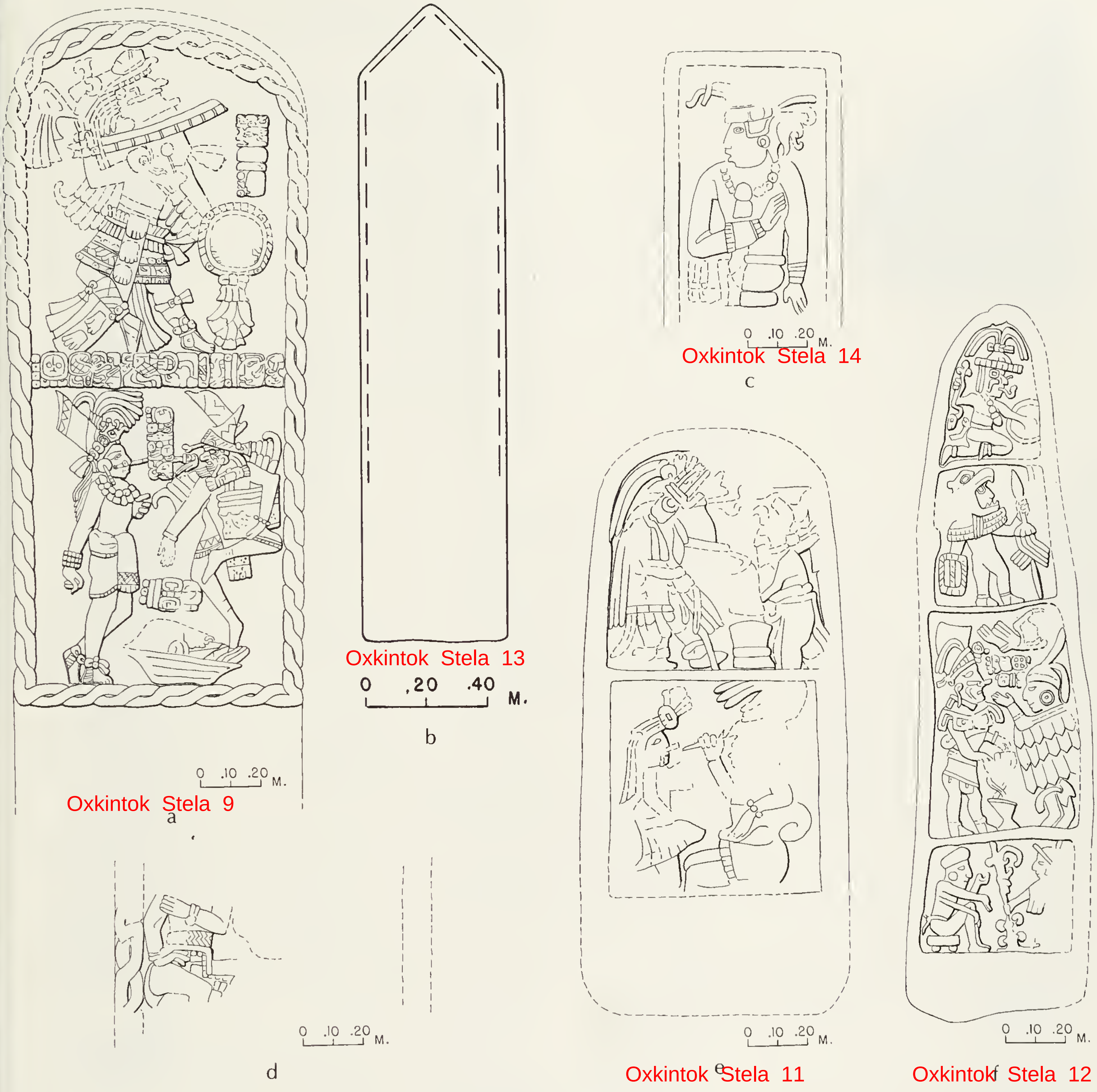


Figure 545. Oxkintok. Stelae 9–14: a, Stela 9; b, Stela 13; c, Stela 14; d, Stela 10; e, Stela 11; f, Stela 12.

Stela 19. Carved (fig. 546c; and ibid., fig. 81c). Approximate height of fragments 2.15 m, width .90 m, maximum thickness .48 m. Base and small piece of sculptured surface (fig. 546c) located just south of Stela 18 (see above). Large sculptured part in Museum of Archaeology, Merida, Yucatan.

Museum description reads: "Broken, rectangular monolith, defaced and partly restored. Bas-relief representing two seated personages. Height 1.17 m, width .89 m, thickness .42 m. Municipality of Temax." See discussion under Monuments (above) for confusion in provenience of this monument (Specimen 10) and Stela 2 from Dzilam (Specimen 13).

Sides and back of stela plain. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)

Stela 20. Carved (fig. 546d; and ibid., fig. 86f). Present height 1.77 m, plus fragment of base .63 m high, maximum width .83 m, maximum thickness .36 m. Fallen

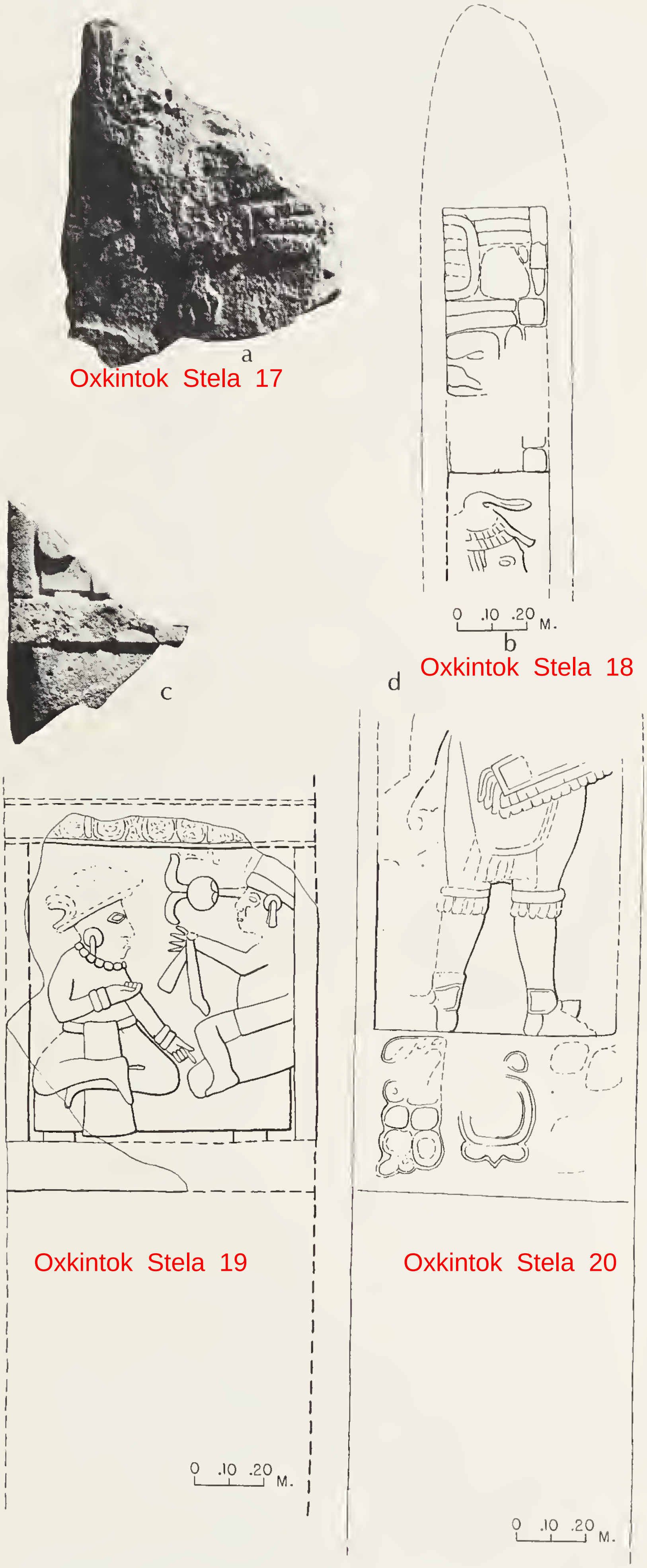


Figure 546. Oxkintok. Stelae 17–20. a, Stela 17, fragment; b, Stela 18, left side; c, Stela 19, fragment and lowest panel; d, Stela 20.

at west edge of low platform in front and west of stairway from South Plaza to complex of Structures 3B2–4 (see fig. 477).

Top of stela and part of base missing. Carving, which shows legs and waist of human figure above hieroglyphic inscription, badly weathered. Sides and back of monument plain. (See Proskouriakoff 1950, p. 161, for discussion of sculpture and suggested date of 9.16.0.0.0—A.D. 751).

Stela 21. Carved (fig. 547; and ibid., fig. 88a). Total maximum height of fragments 3.45 m, maximum width .87 m, maximum thickness .42 m. Fallen on low platform in front and west of stairway from South Plaza to complex of Structures 3B2–4 (see fig. 477).

Stela broken into many pieces but most of sculpture on front survives. Considerable loss through breakage and weathering of glyphic inscriptions on sides of monument (fig. 547). Back of stela plain. (See Proskouriakoff 1950, pp. 161–162, for discussion of sculpture and possible date.)

Stela 22. Plain. I have no measurements. Located on causeway that crosses South Plaza from complex of Structures 2B9–13 to complex of Structures 3C1–7. I have no notes on this monument other than that it is plain.

Stela 23. Carved (fig. 548a). Height of joined fragments 1.41 m, width .80 m, thickness .42 m. At edge of South Plaza just west of Structure 3C4. Badly broken fragment of stela that seemingly was carved only with hieroglyphs on front. Sides and back of monument well cut and dressed but plain.

Stela 24. Carved (fig. 548b; and ibid., fig. 86d). Height 1.79 m, maximum width .56 m, maximum thickness .26 m. Fallen at edge of South Plaza near southwest corner of Structure 3C4.

Badly broken monument with much weathered and eroded carving of human figure on front. Sides and back of stela well cut and dressed but plain. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)

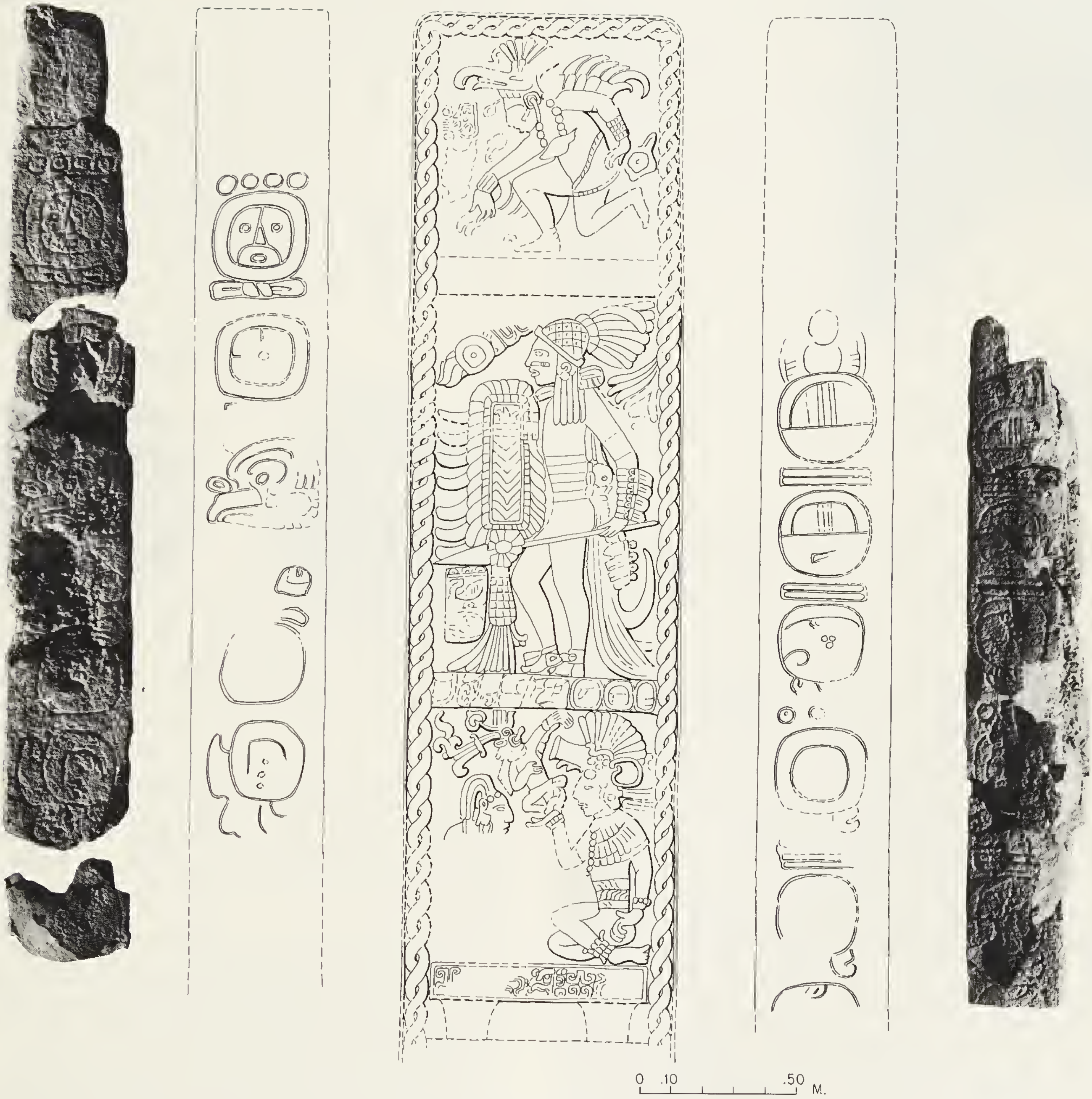
Stela 25. Carved (ibid., fig. 87b). Fragment .98 m high, .86 m wide, .50 m thick. Other fragment .50 m by .37 m by .32 m thick. Found at foot of broad lower flight of stairway to Structure 3C3. Smaller fragment may be from different monument.

Carving on both fragments badly eroded. Larger piece (ibid., fig. 87b) is base of stela with lowest part of sculpture enclosed by twisted-rope border. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.) Carving on smaller piece too weathered and fragmentary to discern subject.

Stela 26. Carved (fig. 548c; and ibid., fig. 81d). Fragment 2.05 m high, .98 m wide, .30–.36 m thick.

Originally located in niche in stairway of Structure 3C3 (see p. 294 and fig. 505b).

Lower part of stela missing. Deep carving on front fairly well preserved. Sides and back of monument dressed but plain. (See Proskouriakoff 1950, p. 161, for discussion of sculpture.)



Oxkintok Stela 21

Figure 547. Oxkintok. Stela 21.

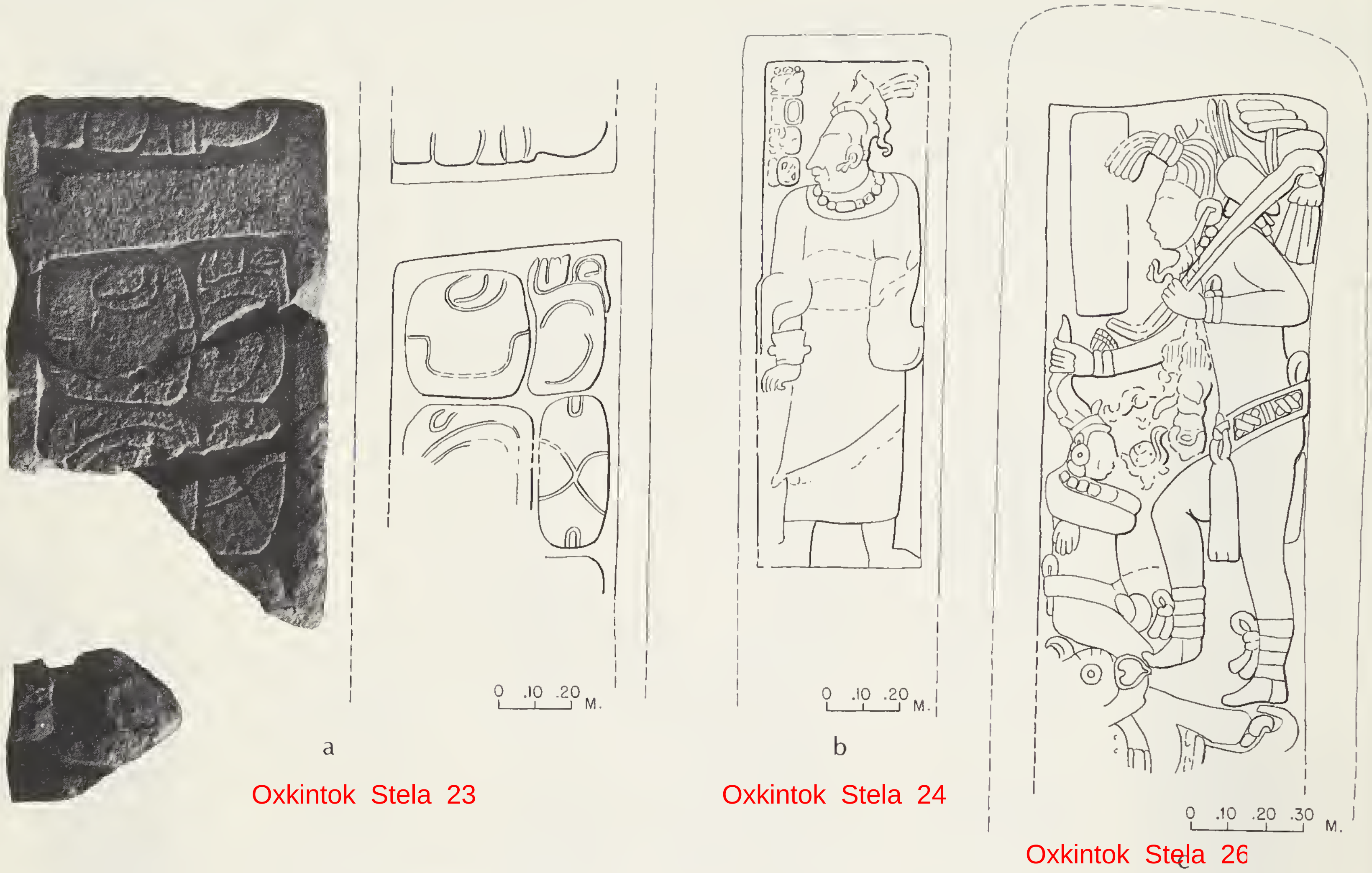


Figure 548. Oxkintok. Stelae 23, 24, 26: a, Stela 23; b, Stela 24; c, Stela 26.

ALTARS

Thirty-one altars were observed at Oxkintok and located on the map of the ruins (fig. 477). There are undoubtedly more, possibly many more, that we did not find. As might be expected, the great majority of the altars are located in the central area of the city, but three are in the North Group and six are from other smaller groups. Surprisingly, no altar was found in the South Group.

Eight of the altars were carved, and three others were too eroded to tell whether they were sculptured or not. Twelve were plain, and of the eight monuments on which we have no information other than their locations, it is highly probable that all, or nearly all, were also plain. Twenty altars were measured and drawn, and cursory observations were made on three others. In contrast to the situation at Sayil and Kabah, and I believe at most Puuc ruins, there are more drum altars at Oxkintok than there are column altars (see Sayil, p. 135, for definition of drum and column altars). This of course pertains to the sample on which we have measurements. A canvass of all altars at the site might change the proportion. Two of the drum altars were sculptured, both with carvings of human figures, and three others may have been sculptured, but were too eroded to tell. Four column altars were carved, all with the twisted-rope and pleat design, a common Puuc motif. Two other monuments, whose dimensions we do not have and therefore cannot classify as drum or column, also carried the twisted-rope and pleat around their upper edges.

Altar 1. Plain (fig. 549a). Height .37 m, diameter .51 m. Lying in small courtyard north of Structure 1B1. Well-cut and shaped drum altar.

Altar 2. Plain (fig. 549b). Height .33 m, diameter .49 m. In front of Stela 4 at foot of stairway to Structure 1B2 (see fig. 481). Well-cut drum altar with very slight entasis.

Altar 3. Plain (fig. 549c). Height .61 m, diameter .58 m. Located short distance (13 m) south of main stairway to North Group and just west of causeway. Low column altar with rounded bevel of upper rim, a feature that is common on lower edge but unusual on upper.

Altar 4. Not known whether plain or carved (fig. 549d). Height .25 m, diameter 1 m. In front of Stela 5 at foot of stairway to Structure 2B1. Drum altar so burned and weathered that one cannot tell whether it had been carved.

Altar 6. Carved. Dimensions not recorded. Found just off southeast edge of low round platform, from which monument may have fallen, in court of Northwest Group

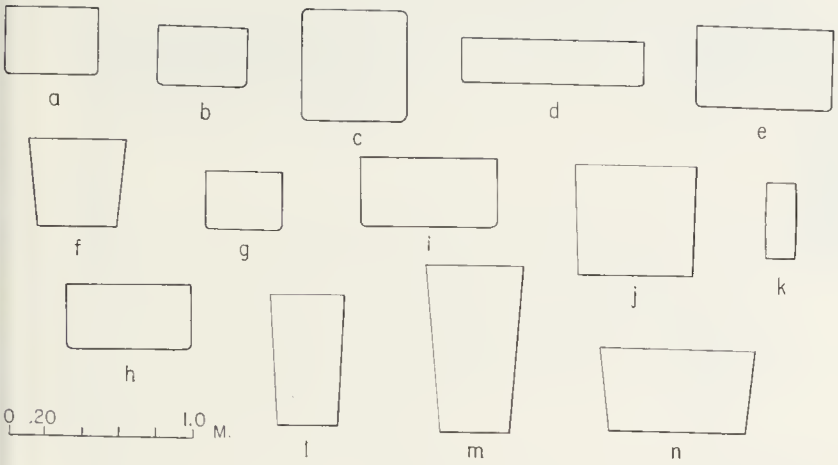
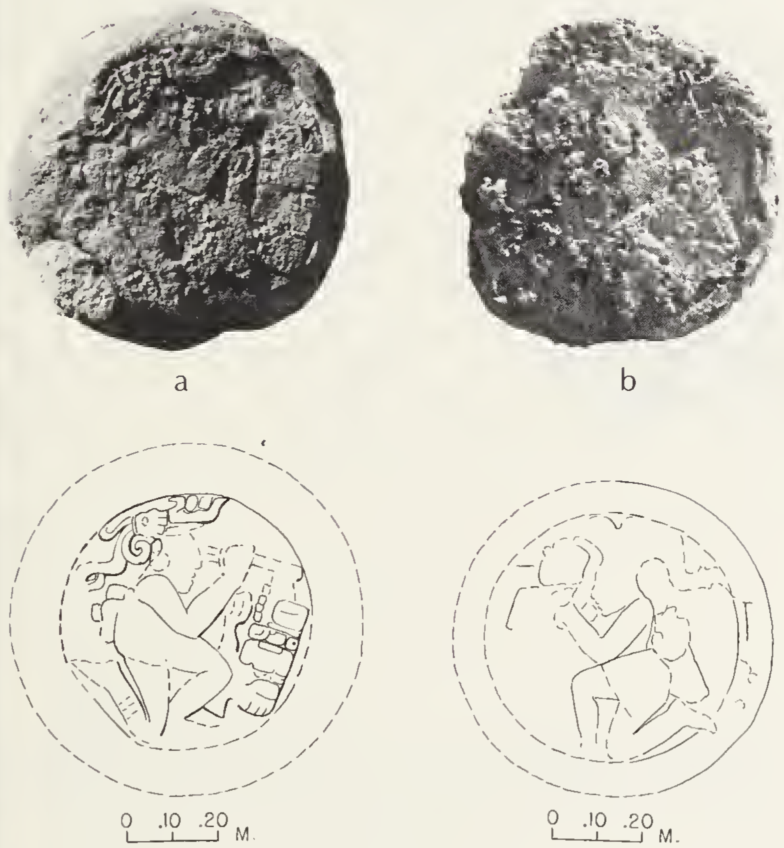


Figure 549. Oxkintok. Profiles of altars 1–4, 7, 9–11, 14, 21, 22, 24, 29, 31: a, Altar 1; b, Altar 2; c, Altar 3; d, Altar 4; e, Altar 7; f, Altar 9; g, Altar 10; h, Altar 11; i, Altar 14; j, Altar 21; k, Altar 22; l, Altar 24; m, Altar 29; n, Altar 31.



Oxkintok Altar 15   Oxkintok Altar 16

Figure 550. Oxkintok. Altars 15, 16, outlines and carving: a, Altar 15; b, Altar 16.

in Quadrangle 2C (see fig. 477). Common twisted-rope and pleat design around upper edge (cf. Altars 19, 20, 26).

Altar 7. Plain (fig. 549e). Height .45 m, diameter .75 m. On low circular platform west of Structure 2B8. Monument rests about .5 m from east edge of platform. Drum altar with vertical sides.

Altar 9. Plain (fig. 549f). Height .48 m, diameter at top .53 m, at bottom .43 m. In front of Stela 9 and resting on secondary platform that partly buried stela (see fig. 488). Tapered drum altar of common Puuc design.

Altar 10. Plain (fig. 549g). Height .32 m, diameter .42 m. In front of Stela 11 and Structure 2B7. Small drum altar with very slight entasis.

Altar 11. Probably carved (fig. 549h). Height .35 m, diameter .68 m. In front of Stela 15 and Structure 2B12. Badly burned and weathered drum altar that probably was sculptured, but too eroded to be certain.

Altar 13. Plain. Dimensions not recorded. Lying in southeast corner of court of Structures 2B11–12. My only information on this monument is that it was not sculptured.

Altar 14. Probably carved (fig. 549i). Height .38 m, diameter approx. .75 m. In court of Structures 2B9, 10, the western of three monuments in an east-west line in front of Structure 2B10. Drum altar broken into numerous pieces. Upper surface weathered away but probably once carved. Altar faced on bottom as well as sides.

Altar 15. Carved (fig. 550a). Height .27 m, diameter .77 m. In court of Structures 2B9, 10, the middle of three monuments in an east-west line in front of Structure 2B10. Weathered and burned drum altar with carving of kneeling human figure on upper surface. Altar faced on bottom as well as sides.

Altar 16. Carved (fig. 550b). Height .37 m, diameter .70 m. In court of Structures 2B9, 10, the eastern of three monuments in an east-west line in front of Structure 2B10. Badly weathered drum altar with carving on upper surface that may have been somewhat similar to that on Altar 15. May have been hieroglyphs on sides but probably not. Altar apparently not faced on bottom.

Altar 17. Carved (fig. 551a). Height 1.05 m, diameter at top .76 m, at bottom .66 m. Lying just off west side of small platform, from which it presumably fell, in court south of Structure 2B10. Typical column altar with twisted-rope and feather or pleat molding around upper edge. Well dressed on top, bottom, and sides, which carry entasis.

Altar 19. Carved (fig. 551b). Height approx. 1 m, diameter at top .72 m, at bottom approx. .56 m. On terrace north of Structure 3B3. Badly broken and weathered column altar with remains of common twisted-rope and pleat molding around top, and woven or plaited-mat design in panel on side.

Altar 20. Carved (fig. 551c). Height 1.58 m, diameter at top .67 m, at bottom .63 m. On terrace north of Structure 3B3. Very large column altar with common twisted-rope and pleat molding around top. Monument finely cut and finished on top, sides, and bottom.

Altar 21. Plain (fig. 549j). Height .61 m, diameter at top .67 m, at bottom .63 m. In South Plaza west of Structure 3C4 and at southwest edge of causeway, near Miscellaneous Sculpture 3. Badly weathered drum altar that probably was dressed on bottom. Bare chance that some carving existed on sides, but probably not.

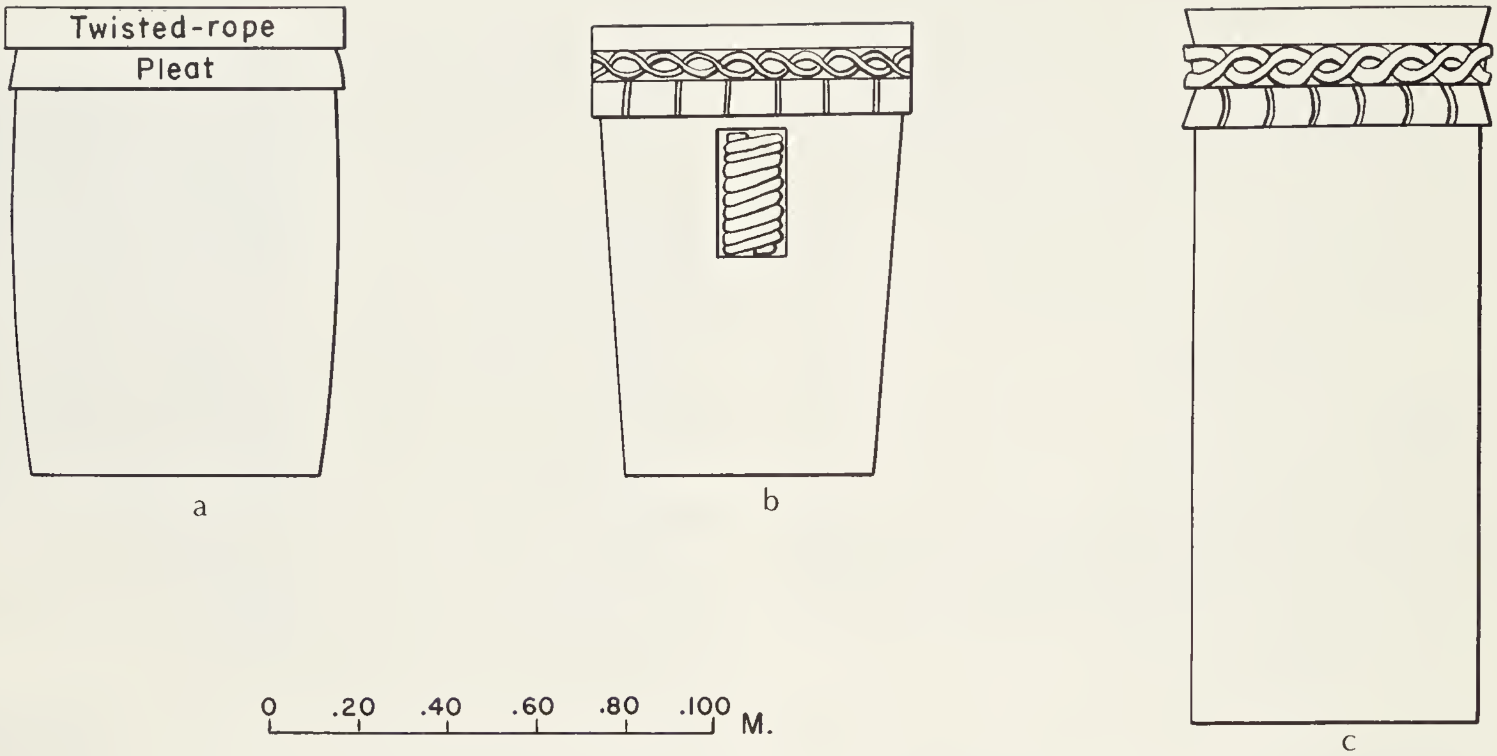


Figure 551. Oxkintok. Altars 17, 19, 20, profiles and carving: a, Altar 17; b, Altar 19; c, Altar 20.

Altar 22. Plain (fig. 549k). Height .42 m, maximum diameter .17 m. In court in front of Structure 3C5. Small column altar with very slight entasis.

Altar 24. Plain (fig. 549l). Height .72 m, diameter at top .41 m, at bottom .33 m. In court in front of Structure 3C6 and near southeast corner of small low platform. Tapered column altar, well faced on top, bottom, and sides, which carry slight entasis.

Altar 25. Carved (fig. 552a). Height and diameter unknown. Found at northeast corner of mound that limits south side of court south of Structure 3C2 and east of Structure 3C3. Badly broken altar that carried common twisted-rope and pleat decoration around upper edge. Monument probably like Altar 26 (see below).

Altar 26. Carved (fig. 552b). Height .90 m, diameter .75 m. Found at northeast corner of mound that limits south side of court south of Structure 3C2 and east of Structure 3C3. Badly weathered column altar that had carried twisted-rope and pleat decoration around top. Seemingly straight sided and little or no taper.

Altar 29. Plain (fig. 549m). Height .92 m, diameter at top .54 m, at bottom .38 m. In court before south building in small group west of Structure 3D1. Well-cut tapered column altar. All building remains in group seem to be of Puuc style.

Altar 31. Plain (fig. 549n). Height .46 m, diameter at top .86 m, at bottom .76 m. At foot of talus on north side of platform supporting Group of Structure 2C1. Exceptionally finely cut and finished tapered drum altar.

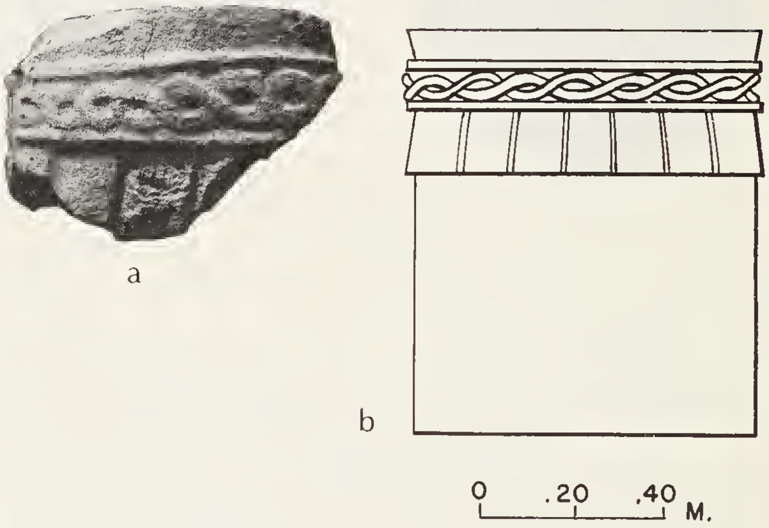


Figure 552. Oxkintok. Altars 25, 26: a, Altar 25; carving on fragment from top; b, Altar 26, profile and carving copied from Altar 25.

OUTLYING RUINS

Northeast, east, and south of Oxkintok, at distances of approximately 1 to 3 km, are several ruins that were visited and examined in varying degrees of thoroughness. I do not know whether these ruins should be considered a part of the great site of Oxkintok or not. Each small site has its own name by which it is known to the local inhabitants, and this tends to set the ruins apart from the central site. On the other hand, each ruin is easily visible from the higher pyramids at Oxkintok and one cannot avoid the feeling that these little sites stood in the relation at least of satellites to the central city if they were not actually part of it.

Xemtzil

According to Roys (personal communication; and see 1931, p. 241) the name is probably a corruption of *x-em-tzul,* a woody vine (*Marsdenia* sp.). If the spelling were *x-em-dzul,* however, the meaning would be: where the great man, or lord, descends, which was the translation given by our Indian laborers.

The ruin known as Xemtzil rests on a hilltop of the main range of the Puuc hills about 2 km northeast (48°15′, magnetic, from Structure 3B6) of the center of Oxkintok. Reputedly, the location is the highest in the region, and it does in fact seem to be that when one stands on the tumble-down pyramid at the site and is afforded a clear view in all directions. The good-sized pyramid, which is 10 or 12 m high and is now a mass of loose rock, rests on a large substructural terrace that extends southward to form a court limited by a long low platform. Presumably the pyramid faced south on this court, but the structure is so fallen that one cannot even discern whether it once supported a temple building. No cut stone was observed in the debris, and the only masonry visible was a bit of substructural wall of the block variety, not diagnostic as to period. Just off the ridge to the northwest is a small mound and there are other ruins on top of the ridge to the east.

Mercer (1896, pp. 45–46, 60) reports visiting and carrying out excavations at Xemtzil, but he places the structure in a different location, seemingly in or near the center of Oxkintok, from the one identified by local people as Xemtzil in 1940.

X'Castillo
(Castillo Pak)

Castillo is of course the Spanish word for castle and *x* is the Maya feminine prefix. *Pak* means wall.

Some 500 m south of Xemtzil (see above) and approximately 1.5 km east-northeast of Oxkintok is the building that presumably gives the name to the site. The ruins, which are halfway or more down the hillside from the crest of the ridge but still well above the valley floor, consist of a large building facing south on a terrace from which descends a well-preserved stairway to a lower terrace. In front of the stairway is a small, low, rectangular platform that supports a column altar near its center (fig. 553). At each side of the staircase is a buttresslike block of masonry. Stairs, buttresses, and terrace wall are faced with finely cut, faced, and fitted stone.

The building on the upper terrace was originally a single range of four rooms, all of which faced south, that was later encased on the north, east, and west sides by a

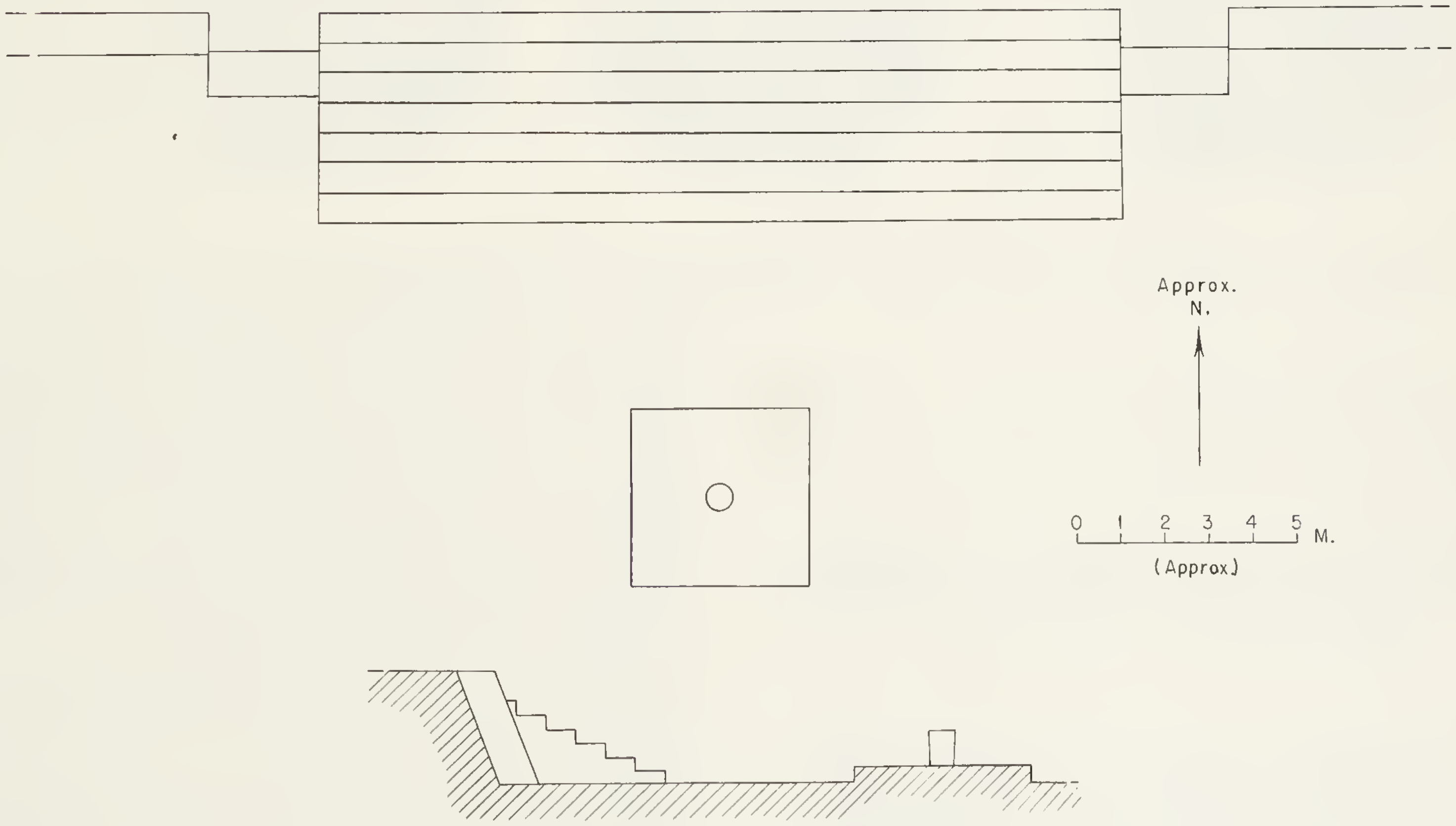


Figure 553. X'Castillo, Main Group. Sketch plan and section of south stairway and altar.

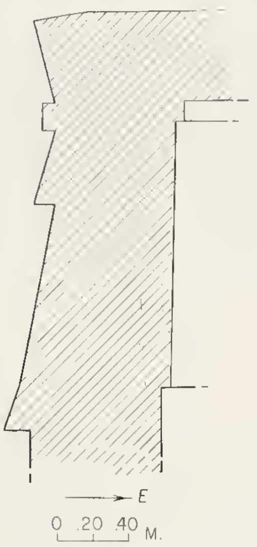


Figure 554. X'Castillo, Main Group. Section of upper facade of original building.

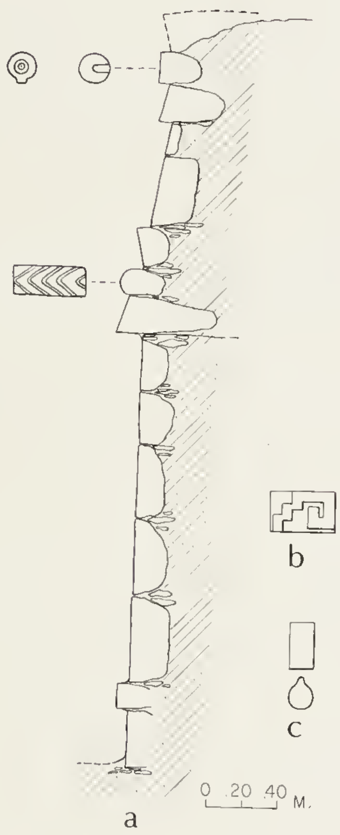


Figure 555. X'Castillo, Southwest Group: a, section of northern facade of first story, with detail of middle members of medial and cornice moldings; b, fallen stone with step-and-fret design in debris of buildings; c, fallen colonnette.

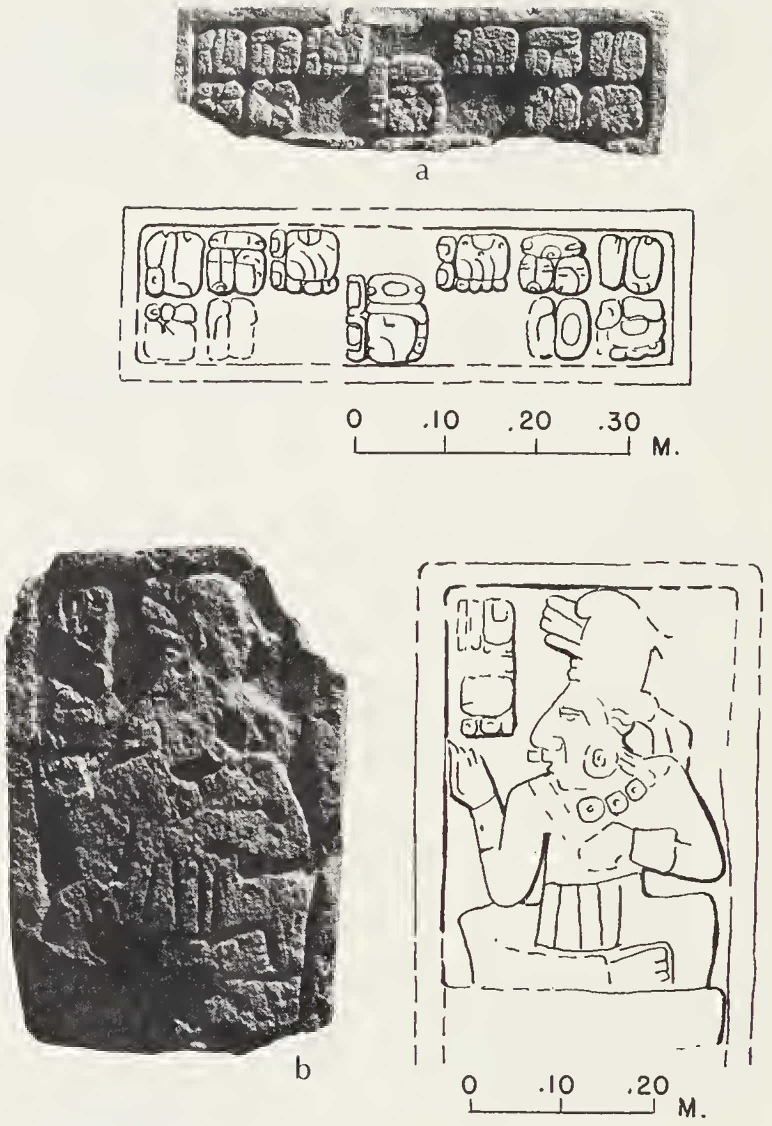


Figure 556. X'Castillo, Southwest Group. Sculpture from near building: a, stone with hieroglyphs; b, carved capstone or wall panel.

loose fill retained by an outer masonry wall that rose on a considerable batter and without any break from the terrace floor to the roof level of the building. Only the south facade of the original structure thus remained visible. The profile of the early facade showed an apron medial molding, a battered upper zone, and a conventional three-member cornice molding (fig. 554). The masonry of the early building and of the facing of the secondary construction represents some of the finest stone work seen at Oxkintok and is surely a product of the classic Puuc school of architecture. There is every reason to believe that the secondary construction, which is much thicker at the north than on the east and west ends, was preparatory to building a second story, an undertaking that was never completed. A sketch plan and section of this structure has been published by Alberto Garcia Maldonado (1959, p. 1).

Some 300 m southwest of the above-described ruins and near the valley floor is a small group centering on a fairly well preserved building of typically Puuc architecture. The structure had a second story that probably was approached by a flying stairway over a vaulted passage at the south. The profile of the facade shows a two-member base molding, three-member medial and cornice moldings, and a slightly battered upper zone (fig. 555a). The

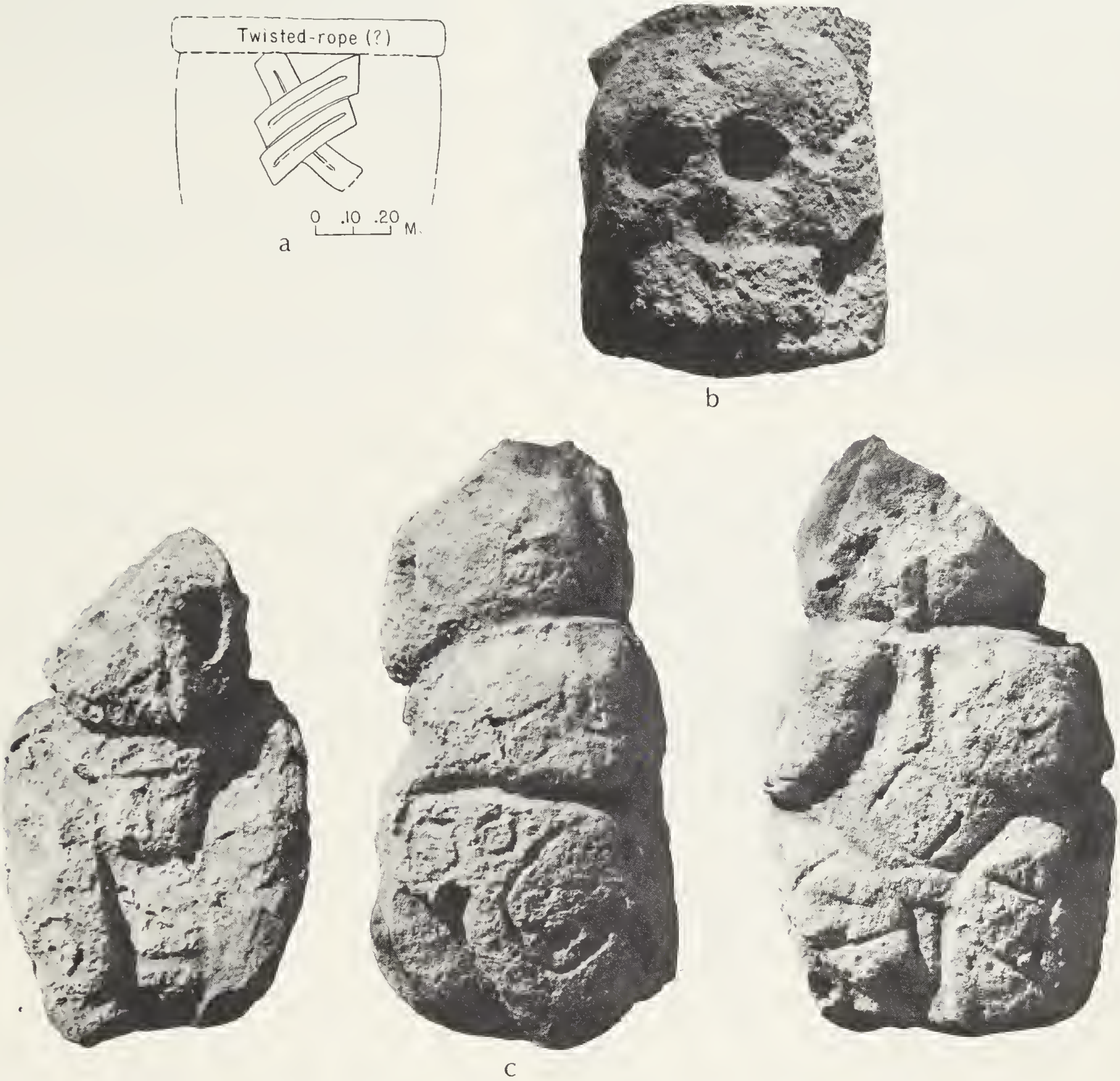


Figure 557. X'Castillo, Southwest Group. Altar and miscellaneous sculpture: a, fragment of altar before stairway to second story; b, stone skull from clearing behind structure; c, front, side, and rear view of stone jaguar (?) from clearing behind structure.

central member of the medial molding is rounded and carries a chevronlike design that might imitate the vertebrae of a serpent. The middle member of the cornice molding carries a design of interlocking disks that is frequently seen as a fillet across the brow of facade masks. In the debris of the building are some stones with a step-and-fret design of a size that might have been part of a base molding (fig. 555b), and there are colonnettes (fig. 555c), and banded facade columns. Also found near the building were a stone .63 m long, .19 m high, and .25 m deep with a panel of hieroglyphs on the face (fig. 556a), and a sculptured capstone or wall panel (fig. 556b) .60 m long, .38 m wide, and varying in thickness from .12 m to .17 m. Directly in front of the remains of the stairway to the second story is a large but badly broken and weathered altar with a maximum diameter of .72 m and height of .48 m that has the plaited mat design on one side and the traces of what probably was a twisted-rope molding around the upper edge (fig. 557a). In a clearing behind the structure we found a stone skull .31 m high by .23 m deep (fig. 557b) and the badly eroded figure of what I take to be a jaguar carved in the full round (fig. 557c). The sculpture measures .58 m high, .37 m wide, and .28 m deep.

Kupaloma

(Xkupaloma)

Ku means nest in Maya, and *paloma* is pigeon or dove in Spanish. The site contains a building with a partially standing roof comb, and it is presumably the imagined likeness of that structure to a dovecote, as in the case of the House of the Pigeons at Uxmal, that prompts the name.

The site consists of a number of buildings and small groups, not all of which were visited, spread over a distance of at least 1 km in a generally east-west direction. What seems to be the main focus of the site is a group of maybe 10 mounds located approximately 1.5 km southeast of Oxkintok. Between 100 and 150 m west and a bit south of that group is a relatively well-preserved building (130°, magnetic, from Structure 3B6) that seems to mark the western limit of the site. Some 200 m south-southeast of the main group is another small group, not visited; and approximately 1 km to the east is a fairly well-preserved building (110°, magnetic, from Structure 3B6), the one with the roof comb, which marks the eastern limit of our exploration.

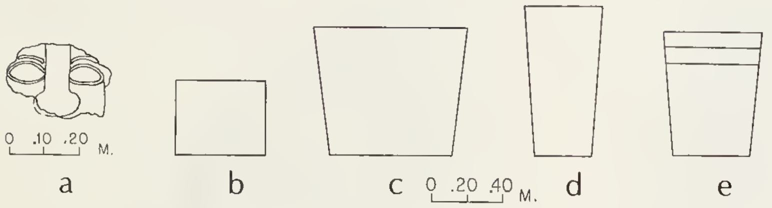


Figure 558. Kupaloma, Main Group. Sculpture and altars: a, fragmentary stone face; b, plain altar; c, plain altar; d, plain altar; e, altar with twisted-rope and pleat design (cf. figs. 551, 552).

The main group, of which no building was in sufficient repair to offer any worthwhile architectural information, centers about a court with fallen structures on three sides and open to the west. Other fallen buildings lie to the north, south, east, and west. The faced stone in the debris seems to be of Puuc variety, exceptional only in being smaller than usual. Several of the typical underground cisterns, or chultuns, were noted, a fragmentary sculpture of what seems to have been a human head (fig. 558a), and a number of altars, four of which were measured and drawn:

Altar. Plain (fig. 558b). Height .42 m, diameter .51 m. I have no further notes on this drum altar.

Altar. Plain (fig. 558c). Height .72 m, diameter at top .87 m, at bottom .69 m. I have no further notes on this drum altar.

Altar. Plain (fig. 558d). Height .85 m, diameter at top .45 m, at bottom .32 m. I have no further notes on this column altar.

Altar. Carved (fig. 558e). Height .70 m, diameter at top .56 m, at bottom .44 m. Column altar with twisted-rope and pleat design around upper edge.

A short distance north of the court referred to above is a platform with fallen building remains and two badly eroded lintels or doorjambs, each of which is sculptured

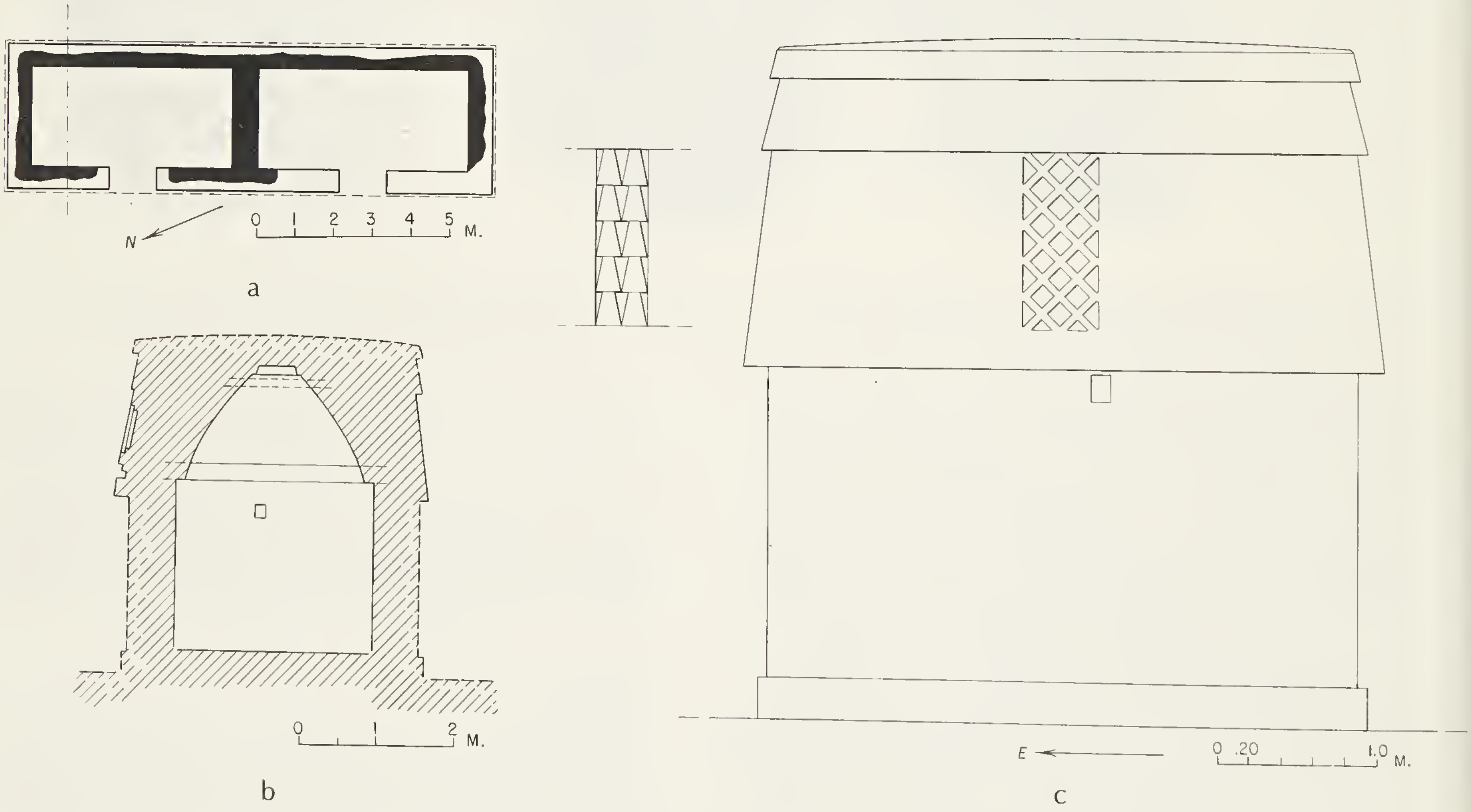


Figure 559. Kupaloma. Western Building: a, plan; b, east-west section; c, restored north elevation, with detail of decoration on rear (east) facade.

with a standing human figure on one face and several hieroglyphs on one edge (see Proskouriakoff 1950, p. 169, fig. 98a, b). One of the stones (ibid., fig. 98a) has a maximum length of 1.53 m, maximum width .50 m, and maximum thickness .22 m; the other (ibid., fig. 98b) is 1.55 m by .49 m, by .26 m.

WESTERN BUILDING

As mentioned above, this structure lies 100–150 m west and slightly south of the main group. The building consisted of two rooms in line, both of which faced west. The vault of the northern room is standing, and a good deal of the upper facade is in place outside that room. The building is typically Puuc in construction and in design.

SUPERSTRUCTURE

Plan. See figure 559a.

Section. See figure 559b.

Elevations. See figures 559c; 560. Partly restored.

Construction. Simple base molding of dressed stone .27 m high and projecting .06 m from base of wall. Only good measure of wall thickness is .70 m for center transverse wall; other walls about .60–.65 m. Small rectangular window in north end wall just below molding (fig. 559b, c). Vault carries slightly arched soffits, offset at spring and beneath capstone on all sides of room, and I think, but am not certain, that vault stone is of highly specialized type. Beam sockets were noted immediately above level of spring of vault and slightly below small offset course beneath capstones. Medial molding appears only on main western facade where sunken panel in battered upper facade leaves projecting course of stones at bottom of panel (figs. 559b, 560, 561). At ends and rear of building entire upper facade zone forms heavy overhanging apron molding (fig. 559c). Cornice molding is shown (figs. 559b, c, 560) with two apron members, as height of debris on roof does not seem to allow for more normal use of third member as coping course. This restoration is, however, by no means certain.

Decoration. Entirely geometric. Fret-and-step motifs separated by split columns over doorways on west facade (figs. 560, 561). Panel of X elements forming lattice design (fig. 559c) on upper facade at north end of building and presumably once existed on fallen south end. Three or four

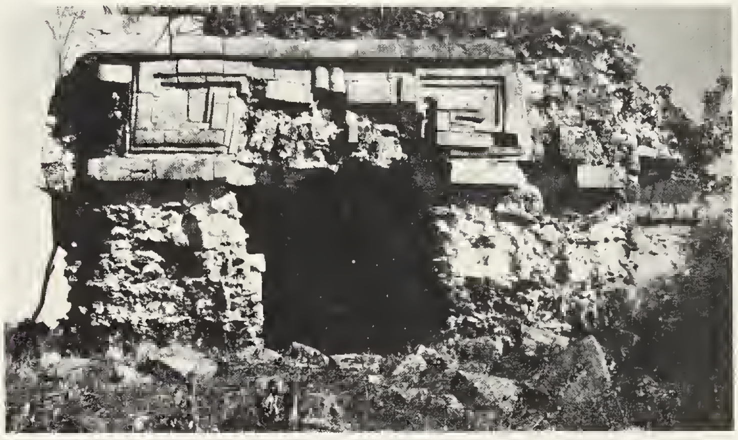


Figure 561. Kupaloma, Western Building. Standing portion of west facade, looking east.

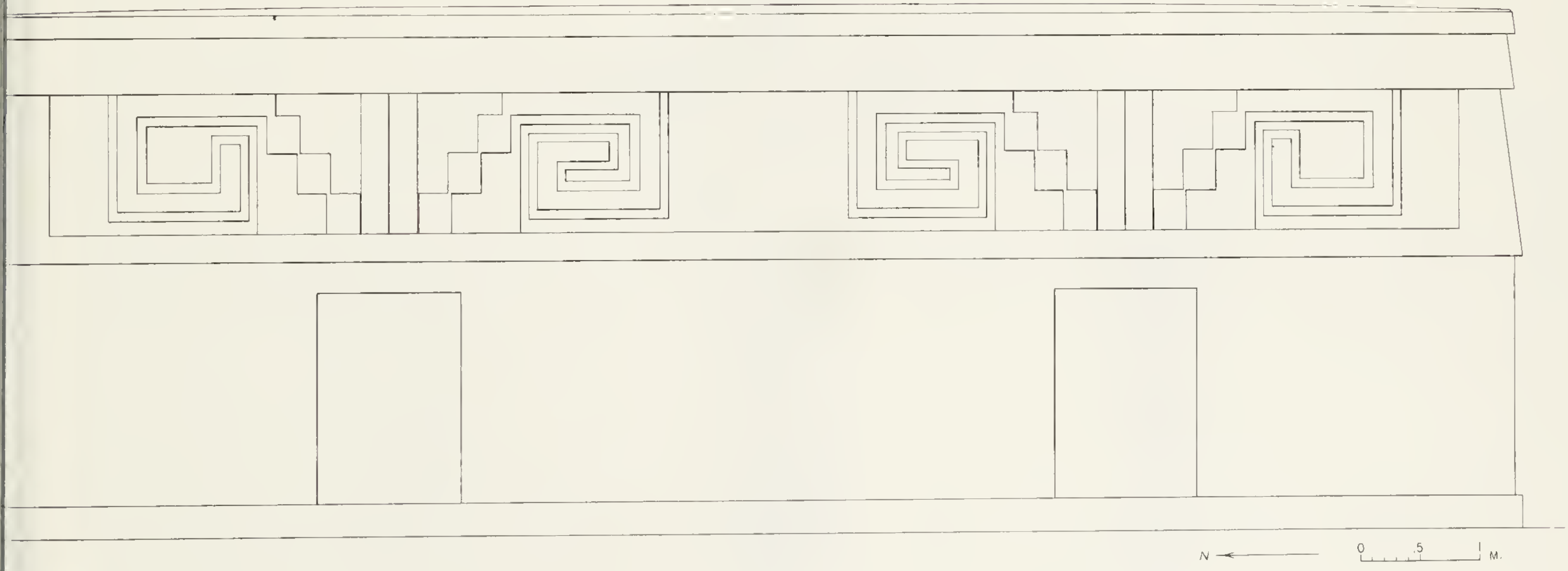


Figure 560. Kupaloma, Western Building. Restored west elevation.

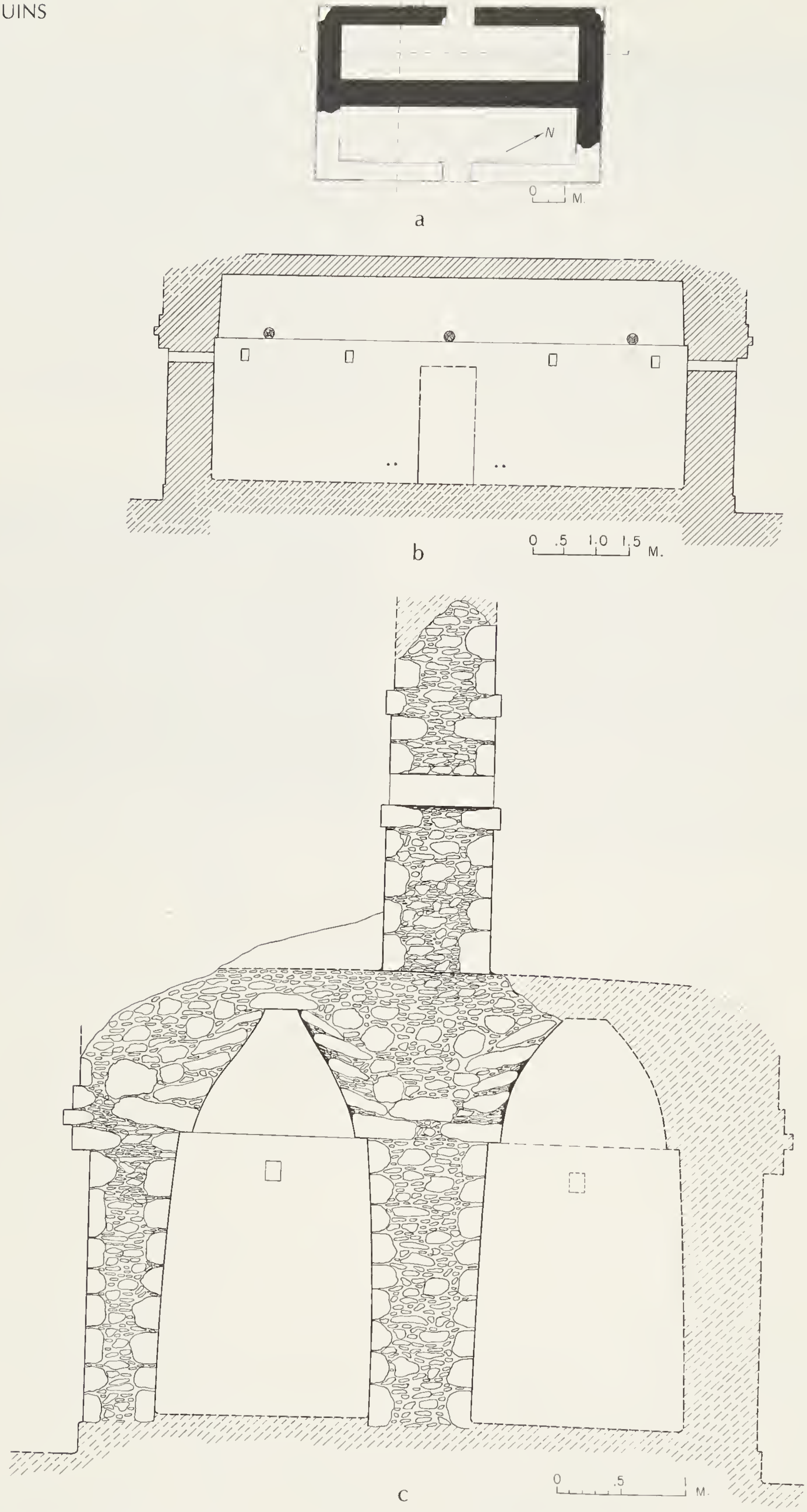


Figure 562. Kupaloma, Eastern Building: a, plan; b, longitudinal section through west room; c, transverse section.

panels of two columns of trapezoids in form of truncated triangles (fig. 559c, detail), spaced across upper facade at rear (east) of building.

EASTERN BUILDING

Situated about 1 km east-southeast (101°, magnetic) of main group. Building consists of two parallel rooms with north-south axes, one room opening to the east, the other to the west. The western room stands virtually intact but for the upper facade, and the western side of the vault of the east room is standing. The perforated roof comb over the solid medial wall, a feature that presumably gives the name to the site (see above), is in relatively good state of repair. Although the structure is essentially Puuc in design and construction, the vaulting is of a crude form not normally associated with Puuc architecture, and the medial molding is of a type more common in the Campeche ruins than in the Yucatan sites.

SUPERSTRUCTURE

Plan. See figure 562a.

Sections. See figure 562b, c.

Elevations. See figures 563, 564. Partly restored.

Base Molding. Single course of dressed stone .24 m high and projecting .03 m from base of wall.

Walls. West wall .56 m thick at doorway, north and south walls .71 m thick, medial wall .81 m thick. Walls built of well-shaped, faced, and fitted, tilelike stone characteristic of Puuc construction (figs. 565, 567a). Inner wall facing virtually as well finished as outer facing (fig. 567b, c).

Doorways. My notes are incomplete in describing jambs and lintels. The plan (fig. 562a) indicates jambs of the wall-stone and cornerstone variety. A photograph (fig. 565b) shows a stone very suggestive of a lintel but that could be a jamb stone.

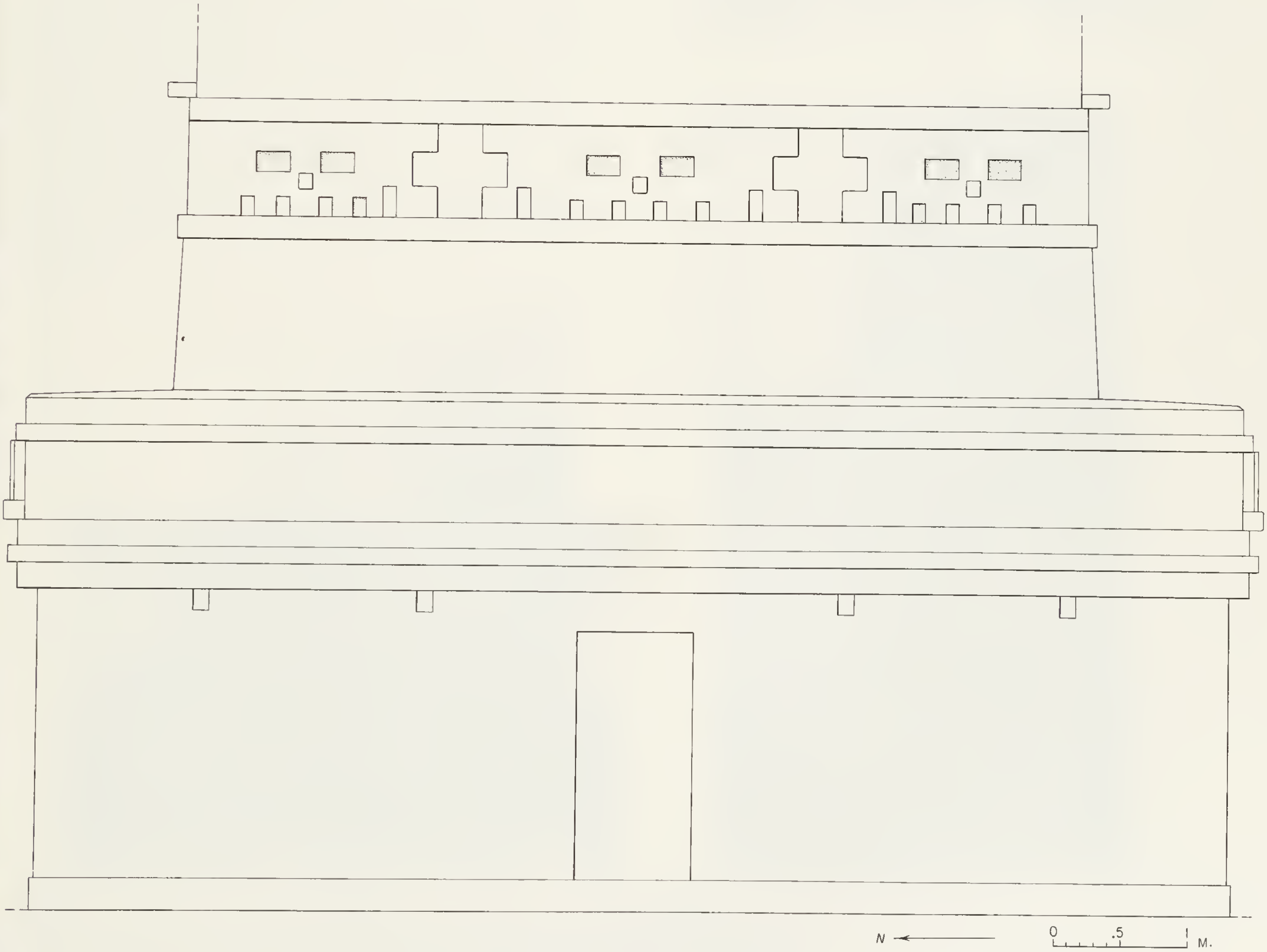


Figure 563. Kupaloma, Eastern Building. Restored west elevation.

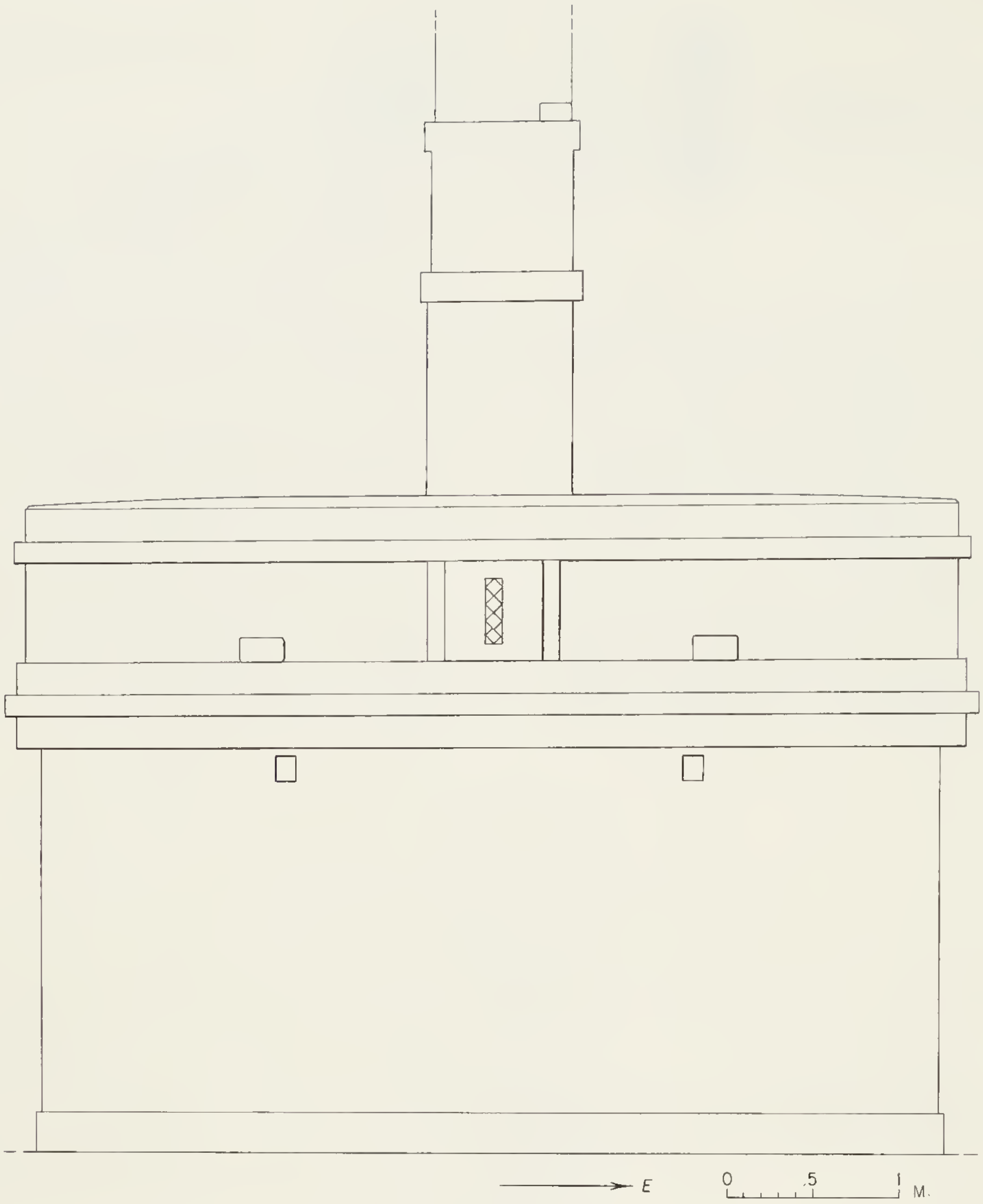
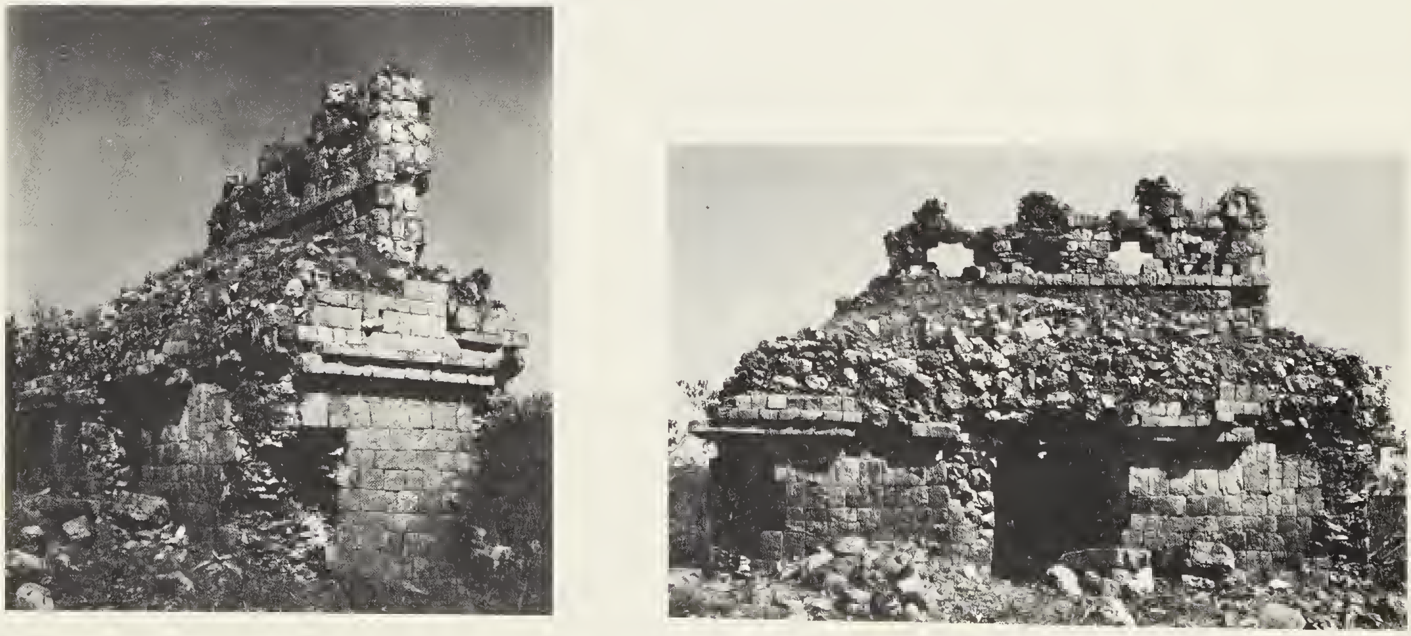


Figure 564. Kupaloma, Eastern Building. Restored south elevation.



a

b

Figure 565. Kupaloma, Eastern Building: a, view from southwest, showing wall masonry, medial molding, and roof comb; b, view from west, showing remains of facade and roof comb.

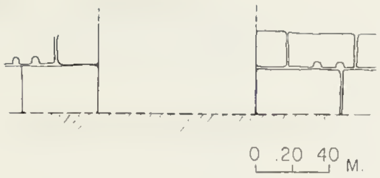


Figure 566. Kupaloma; Eastern Building. Cordholders near floor on inner face of wall at each side of west doorway.

Wall Openings and Depressions. Small rectangular windows or ventilators at each end of each room, one course below level of spring of vault, and immediately below medial molding (figs. 562b, c, 564). Four such openings at same level in west wall (figs. 562b, 563), and presumably in fallen east wall.

One-tongue-at-side-of-stone variety of cordholder on inner face of wall at each side of west doorway (fig. 566).

Vaults and Beams. Offset at spring of vault on all sides of room (fig. 562b, c). No offset beneath capstones. First or spring course of vault is of large, well-cut and faced stone (fig. 567b, c). Above this are four courses of rough slabs laid in a thick bed of mortar with many spalls (fig. 562c). Slabs are tilted so that exposed ends, which are roughly squared off and beveled, point upward (fig. 567b, c). Capstones are better finished than vault stone. Vaulting is very like crude early vaults at Oxkintok except for dressed spring course, slightly more attention to beveling ends of vault stones, and somewhat better shaped capstones.

Beam sockets indicate three large beams just above level of spring of vault in each room (fig. 562b).

Moldings. Medial molding of three rectangular members (figs. 562c, 563, 564). No cornice molding remaining and this is restored in elevation drawings. Roof comb carries simple rectangular moldings.

Roof Structure. Perforated roof comb .84 m thick at base located over medial wall of building (fig. 562c). Roof comb built of well-cut and dressed facing stone, quite

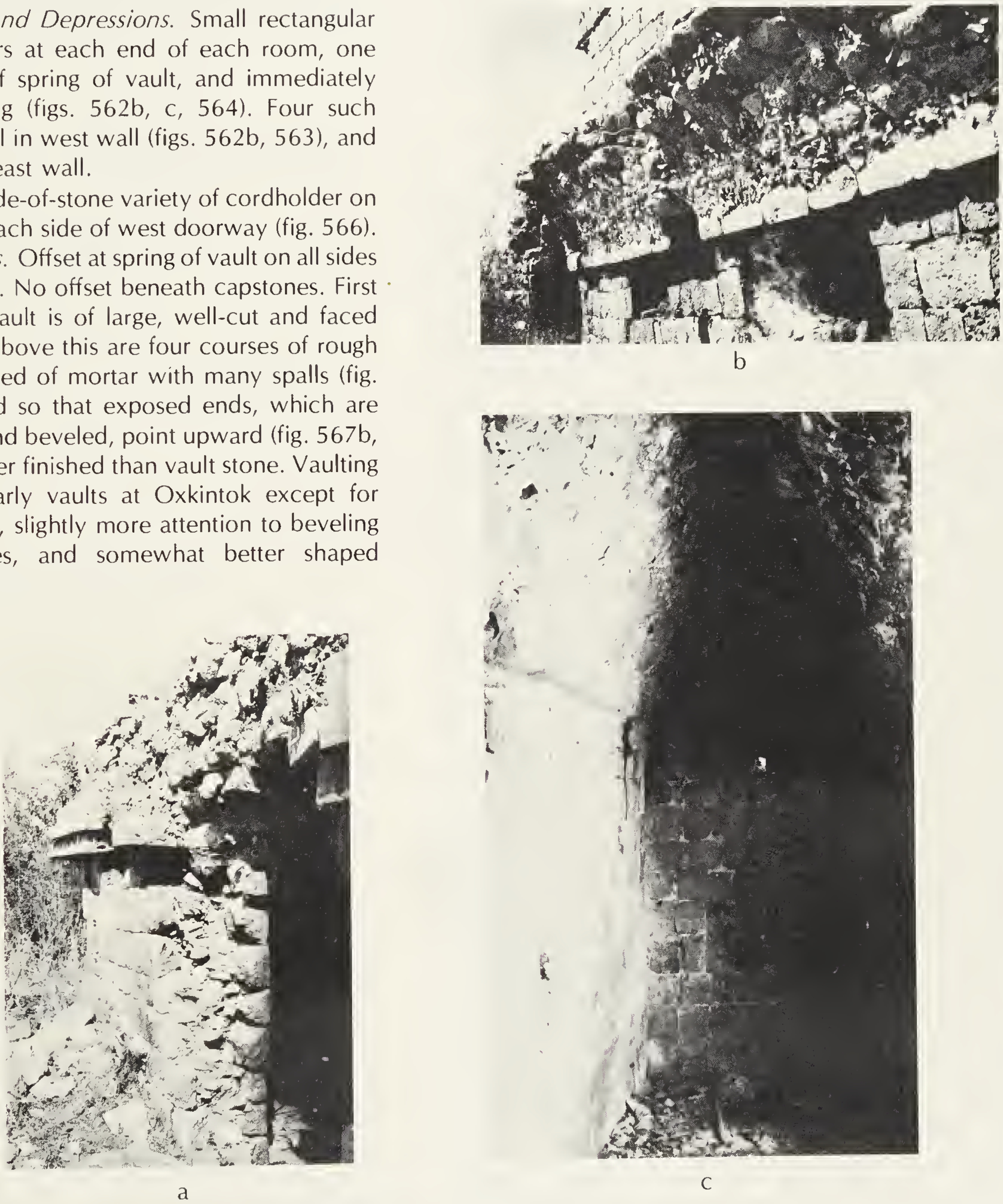


Figure 567. Kupaloma; Eastern Building: a, west doorway, looking northeast, and showing wall in section; b, west side of east vault, looking southwest, and showing well-cut stone of spring course and rough-slab vault masonry above; c, west room, looking south, and showing wall and vault masonry.

comparable to wall stone, laid on hearting of small stone and lime mortar (fig. 565a). Original height of roof comb unknown.

Decoration. Not much of upper facade standing but remains of raised panel with small diamond design at south end of structure (fig. 564), and a number of projecting stone tenons that presumably supported sculpture of stone or stucco.

Roof comb has large openings in form of a Greek cross and smaller perforations and recesses in pattern that suggests simple faces or masks (figs. 563, 565b). Also tenons that probably supported stucco decoration.

Xkepku or Xcepku

Kep can mean something uneven or craggy (Roys, personal communication); *ku* can be a nest of either a bird or a small animal; *x* is, of course, the feminine prefix. *Cep* is the male member or penis (ibid.), and nest of the male member is the translation of the site name given by our Indian laborers.

Good-sized group of structures approximately 2.5 km south-southeast (159°, magnetic, from Structure 3B6) of the center of Oxkintok. Most important court has fallen buildings of Puuc style of architecture on the east and south sides, a much-destroyed pyramid on the west, and is open to the north. One vault of the east building is standing and several other vaults are partly erect. At the front (west) of the structure are a number of fallen sculptured facade stones, apparently elements of masks, and at the rear a three-member, undecorated base molding is visible (fig. 568a). The south building has two well-preserved vaults over adjoining rooms, the west room having been added to the east one. A cordholder in the form of a human foot is set in the south face of the vault of the east room, and there was probably a similar cordholder, now broken off, in the northern vault face. The badly fallen pyramid on the west side of the court supports a small shrinelike structure with light walls about .30 m thick and little doorways possibly .40 m wide (fig. 568b). A plain column altar lies in the court in front of the east building and a column altar with the common twisted-rope design around the upper edge is in front of the south building.

About 25 m northwest of the above-described court is a platform that may have supported a building partly of masonry, partly of perishable materials, or the remains of an unfinished masonry building. The three-member base molding (fig. 569a) is unusual in that it is made of stones so cut that the top and middle members of the molding appear on each stone rather than being formed by separate stones. Near this platform was found the following monument:

Altar. Carved (fig. 569b). Height .81 m, diameter at top .36 m, at bottom .34 m.

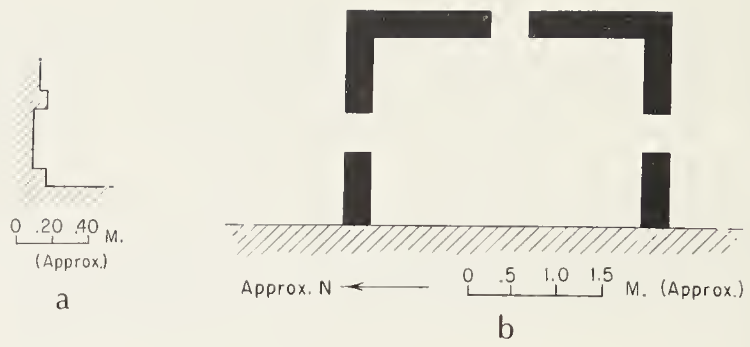


Figure 568. Xkepku, Main Court: a, sketch section of base molding at rear of East Building; b, sketch plan of shrine on pyramid.

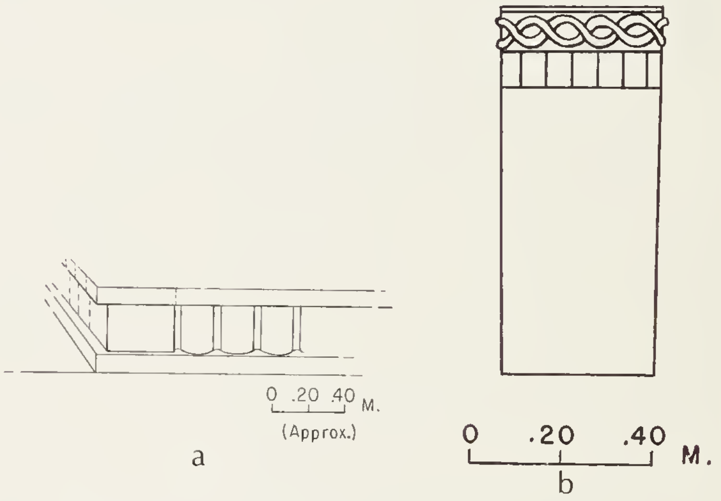


Figure 569. Xkepku, Northwest Platform: a, sketch of base molding; b, altar near platform.

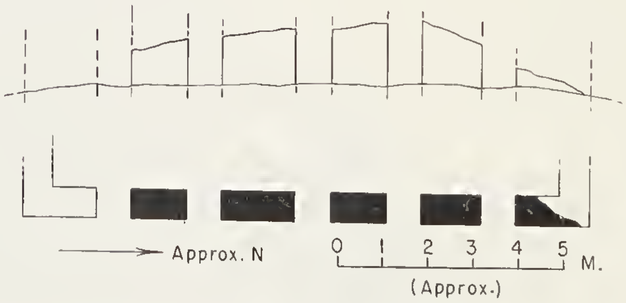


Figure 570. Xkepku, West Court. Sketch plan and elevation of front of West Building.

Column altar with twisted-rope and pleat design around upper edge.

West of the pyramid on the first court described is a small court entered at the south and northeast by paved ramps. On the west side of this court are the remains of a badly fallen building of some interest. All that remains is a line of masonry piers or sections of wall separated by doorways (fig. 570) that apparently was the front or eastern facade of the structure. There is very little debris in front (east) of this multiple entrance and only slightly more behind. No rear wall of the building remains but it most probably has fallen off the edge of the substructural platform which is about 4 m behind the line of piers. The front wall, as represented by the sections between doorways, is .68 m thick, and is built of rough block masonry. The doorjambs are made of two or three vertical courses of stone and there were stone lintels in the debris. Indications are that the structure never carried a vault, but whether it was roofed by perishable construction or was never completed, one cannot say.

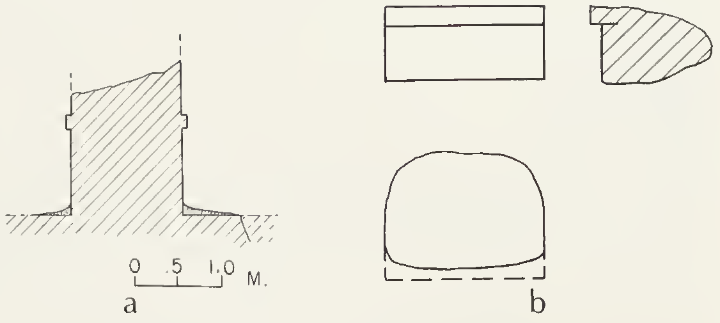


Figure 572. Xkeche. Main Court: a, section of roof comb on West Building; b, sketch elevation, section, and plan of molding stone.

Xkeche or Cehche

Roys (personal communication) informs me that *cehche,* or deer-tree, is a familiar tree name but unidentified (and see Roys 1931, p. 224).

Small group of ruins approximately 2 km south and a little west (187°, magnetic, from Structure 3B6) of Oxkintok and about 1 km west-northwest (282°30′, magnetic) of Xkepku. Group, which consists of a single court with structures on four sides and the remains of a caved-in chultun near the center, is located on a small hillock that rises slightly above the surrounding plain (fig. 571). On the north and south sides of the court are badly fallen buildings that were once vaulted. At the east are two low platforms, and on the west are the remains of a four-room building of which the medial wall, the vault soffits above that wall, and a fragmentary roof comb (fig. 572a), also above the medial wall, are standing. The masonry of the structure is typically Puuc, as is true of all bits of masonry and fallen stone observed at Xkeche. The roof comb was of the perforated variety, faced with dressed stone, and traces of red paint showed on the few fragments of plaster still adhering to the roof comb. On the east face of the medial wall of the building are the very fragmentary remains of a mural painting. Nothing can be made of the subject. Colors still showing are blue, green, yellow, and two shades of red.

A loose stone found at these ruins probably comes from a base molding and is carved so as to include two members of the molding (fig. 572b)—an unusual feature in Puuc architecture but one also observed at Xkepku (see above).

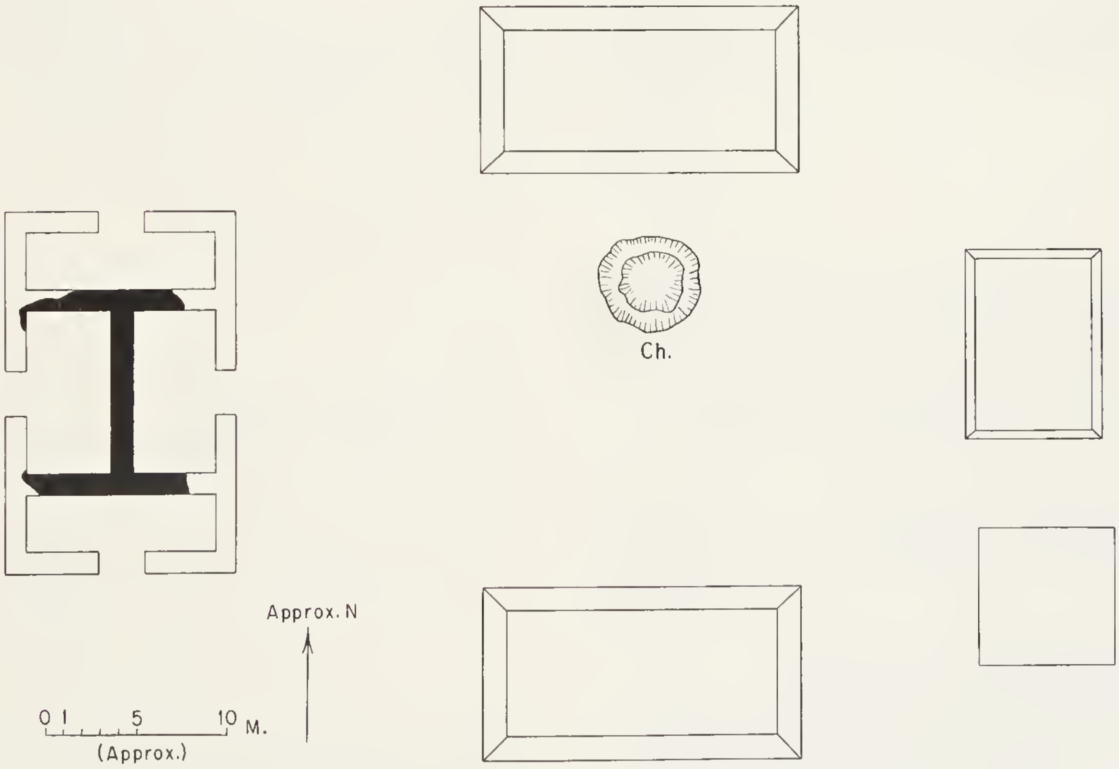


Figure 571. Xkeche. Sketch plan of ruins.

Other Sites

Opichen

(Opocheque)

Approximately 7 km east of Oxkintok and some 12 km east and slightly south of the town of Maxcanu. Stephens (1843, 1:221–222) saw and visited "a high mound, with an edifice on its top . . . [of which] the lower part, to the cornice, was standing. Above the cornice the outer wall had fallen, but the roof remained, and within all was entire." Stephens did not explore the surrounding area.

REFERENCE

Stephens 1843, 1:221–222.

Calcehtok

Approximately 4 km east of Oxkintok and 8 or 9 km east by south of Maxcanu. At the time of my visit (1935) to Calcehtok I was unable to discover remains of any consequence in the vicinity of the hacienda. I observed, however, several small ruins, seemingly of Puuc style, along the road from Maxcanu.

In the Museum of Archaeology in Merida there is a stone sculpture labeled as coming from Calcehtok. The carving, which is of an elaborately accoutered human figure, is badly eroded (fig. 573). The museum description reads: "Rectangular stone, possibly part of a larger composition, with badly worn bas-relief representing a seated personage. Height .86 m, width .44 m, approximate thickness .25 m. Hacienda Calcehtok, Maxcanu." I suspect the stone may have come from Oxkintok or any of the nearby ruins.

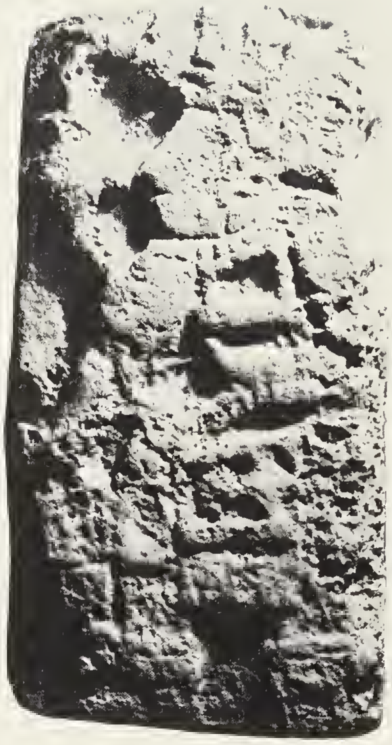


Figure 573. Calcehtok. Bas-relief of human figure.

La Esperanza

Approximately 4 km west of Oxkintok and a little over 1 km south-southeast of Maxcanu. Two groups of structures and one isolated building were observed. What seem to be most important remains are located about 200 m southeast of Hacienda La Esperanza and consist of five structures about a court (fig. 574) with some outlying mounds to the south. Large structure on east was once a three-storied building, and excavations, presumably for building stone, have revealed earlier buried structures. In the court in front of this building is a plain altar. All the structures have been stripped of cut stone, but such masonry as was observed is of Puuc style.

Some 400 m to the northeast another group of buildings was seen, and a partly standing structure was observed approximately 400 m to the southeast. These remains were not visited.

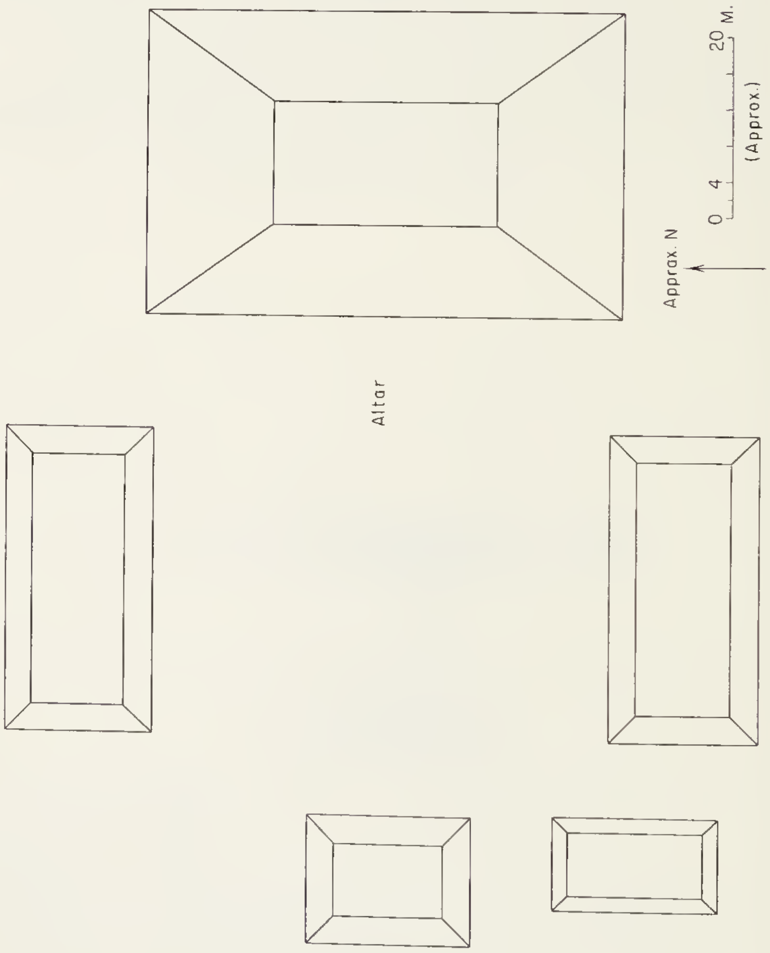


Figure 574. La Esperanza. Sketch plan of Main Group.

Maxcanu

Good-sized town on railroad approximately 60 km southwest of Merida, 100 km north-northeast of Campeche, and 5 km west-southwest of Oxkintok.

Maxcanu is an old town that harbored a pre-Columbian aboriginal settlement at least as far back as post-Mayapan times (Roys 1952, pp. 162, 166; 1957, p. 16) and very probably much earlier. No standing ruins remain there and even in 1588, when Alonso Ponce visited the town, Ciudad Real (1872, 58:443–444) gives considerable attention to the ruins of Oxkintok and mentions other buildings on the opposite side of Maxcanu but says nothing of aboriginal remains in the town. Roys (1952, p. 166; 1957, p. 16), however, points out that the church and convent rest on a large platform that is probably pre-Columbian in origin and, of all the towns in Yucatan and Campeche that I have visited, none shows the use of stone from the ruins in colonial and modern construction to the extent that Maxcanu does. Nearly all the sidewalks are built of such stone; the market place is paved with it; and the stoops of many houses employ the anciently worked stone. There are a number of cylindrical stones at street corners—apparently to serve as hitching posts and fenders against cart wheels—that were either altars or column drums, and there are some other examples of carved stone, but sculpture is not greatly in evidence. It is not known whether this vast amount of cut stone—most of which seems to be of Puuc style—came from the ancient site of Maxcanu or from Oxkintok, La Esperanza, Xulmil (see below), or any of the small unnamed ruins that most certainly lie nearby. It may well come from more than one source.

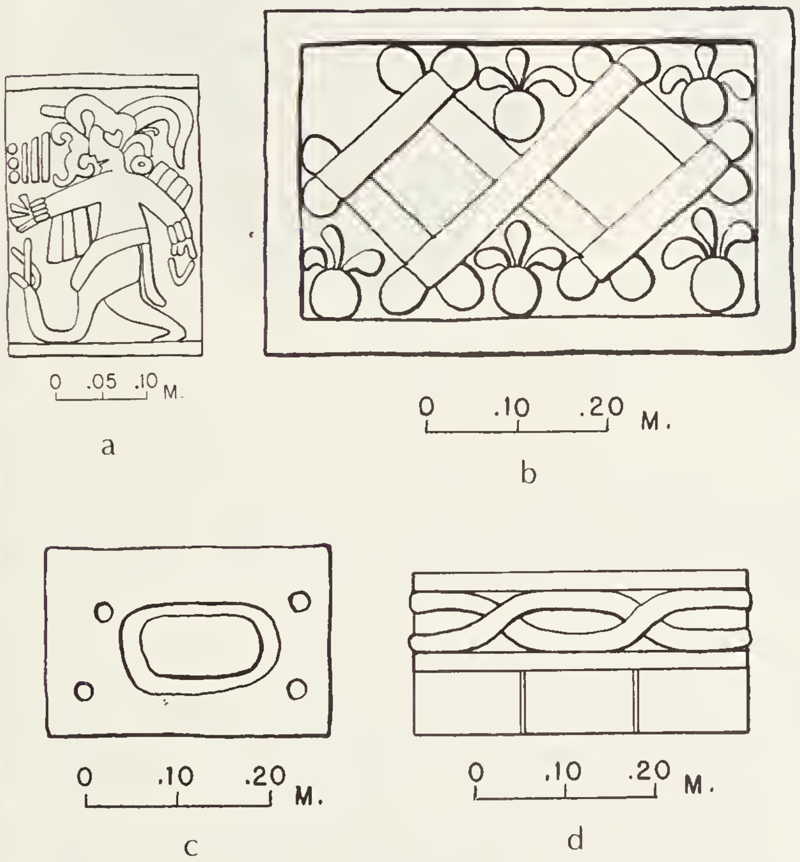


Figure 575. Maxcanu. Miscellaneous sculpture: a, M1, bas-relief of anthropomorphic figure; b, M3, bas-relief design; c, M2, bas-relief design; d, M4, bas-relief of twisted-rope and pleat motif.

Built into the walls of a house on the southeast corner of 16th and 25th Streets are seven sculptured stones, four of which were recorded:

M1. Small bas-relief carving of anthropomorphic figure, possibly a deity, with numerical coefficient of 18 in front of face (fig. 575a; and see Proskouriakoff 1950, fig. 103e). Height .31 m, width .21 m. Proskouriakoff (ibid., p. 169) hazards a guess that the sculpture is of Cycle 10 date.

M2. Low-relief carving of flattened circle with dot at each corner (fig. 575c). Height .20 m, width .31 m. There may be more of this carving that cannot be seen.

M3. Low-relief panel of crossed elements that suggest tubular beads and fruitlike symbols (fig. 575b). Height .30 m, width .50 m.

M4. Carving of common twisted-rope and pleat design (fig. 575d). Height .18 m, width .37 m. Probably comes from molding on a building.

M5–10. There are six sculptures in the Museum of Archaeology, Merida, Yucatan, the provenience of which is given as Maxcanu. They may have come from the town or from any of the sites in the neighborhood.

M5. Sculptured column (fig. 576a; and see Proskouriakoff 1950, fig. 100f). Height .95 m, diameter .45 m. In Museum of Archaeology, Merida, Yucatan.

Feet, legs, and waist of human figure, above which sculpture is broken. Three hieroglyphs beside left leg of figure. Carving occupies about one-third circumference of column, which presumably is from a doorway. Museum description reads: "Fragment of stone column with hieroglyphs and part of human figure (feet). Relief. Height .83 m, diameter .47 m. Maxcanu."

The difference between my measurement of the height of the column and that given on the museum label is probably that I give the total height whereas the label gives the height of the carving. (See Proskouriakoff 1950, p. 167, for discussion of sculpture.)

M6. Human head of stone (fig. 576b). In Museum of Archaeology, Merida, Yucatan. Sculpture in full round. Museum description reads: "Human head without attributes (mask). Height .24 m, width .16 m, thickness .20 m. Maxcanu."

M7. Human head of stone (fig. 576c). In Museum of Archaeology, Merida, Yucatan. Tenon for mounting sculpture on wall surface or the like at back of head. Museum description reads: "Human head of stone (mask) in high relief; upper part broken. Height .23 m, width .20 m, thickness to the tenon .24 m. Maxcanu."

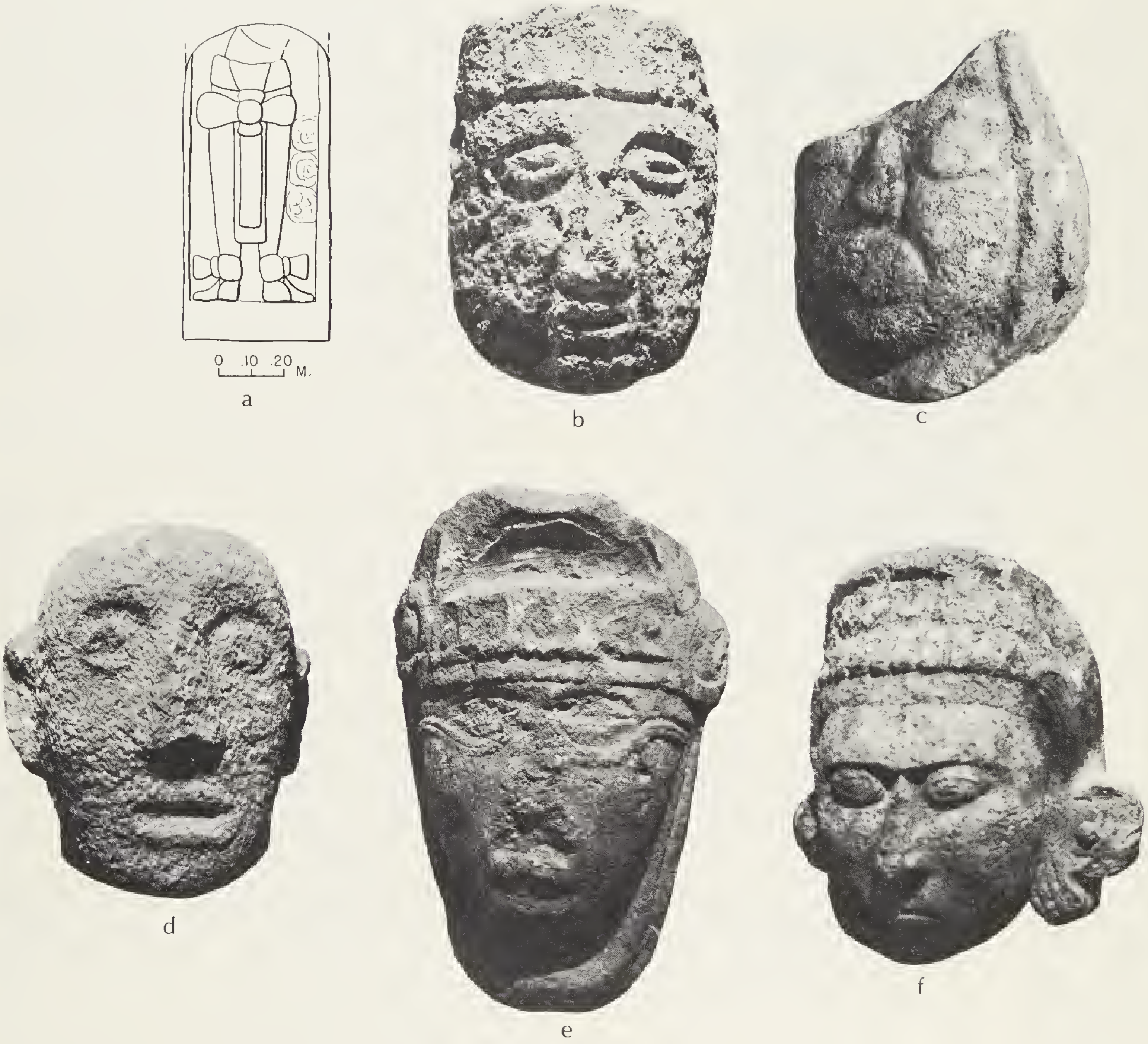


Figure 576. Maxcanu. Miscellaneous sculpture: a, M5, column with human figure in low relief; b, M6, human head of stone; c, M7, human head of stone; d, M8, human head of stone; e, M9, human head of stone, apparently in jaws of serpent; f, M10, human head of stone.

M8. Human head of stone (fig. 576d). In Museum of Archaeology, Merida, Yucatan. Sculpture in full round. Museum description reads: "Human head without attributes. Height .25 m, width .26 m, thickness .20 m. Maxcanu."

M9. Human head of stone (fig. 576e). In Museum of Archaeology, Merida, Yucatan. Although my notes do not mention it, I believe the sculpture portrays the common motif of a human head in the jaws of a serpent. Museum description reads: "Human mask of reddish stone with headdress a diadem of disks or rosettes, defaced in places, facial tattooing below the eyes. Height .39 m, maximum width .25 m, thickness .14 m. Maxcanu."

M10. Human head of stone (fig. 576f; and see Palacios 1945, p. 376, lower right). In Museum of Archaeology, Merida, Yucatan. Sculptured in full round. I do not know whether there is a tenon at the back. Museum description reads: "Head from Municipio of Maxcanu. Originally was fixed in a wall. Height .31 m, from ear to ear .29 m, from nose to occiput .24 m."

Xulmil
(Xumil)

Eight or 9 km west of Oxkintok and approximately 4 km southwest or west-southwest of Maxcanu.

Although the ruins of Xulmil seem to be much older than the protohistoric town of Tuchican, which was on the plain just west of the ruins, where Hacienda Granada is now, Roys (1952, pp. 162–163) thinks that Xulmil may have been a subdivision, or barrio, of Tuchican. The ruins, which are in the hills overlooking the western plain, consist of at least three groups of structures stretching a distance of about .5 km in a generally east-west line. The central group, located about midway between the east and west groups, is the smallest. All structures there are badly fallen but much well-cut stone of Puuc style may be seen in the debris. Underground cisterns, or chultuns, were observed in all three groups.

The east group, which is in poor state of repair but the best preserved of the three, is composed of a large substructural platform, possibly 100 m in length, and several buildings a short distance off the platform to the south (fig. 577). The structures on the platform are arranged about two courts, the eastern court being higher than the western

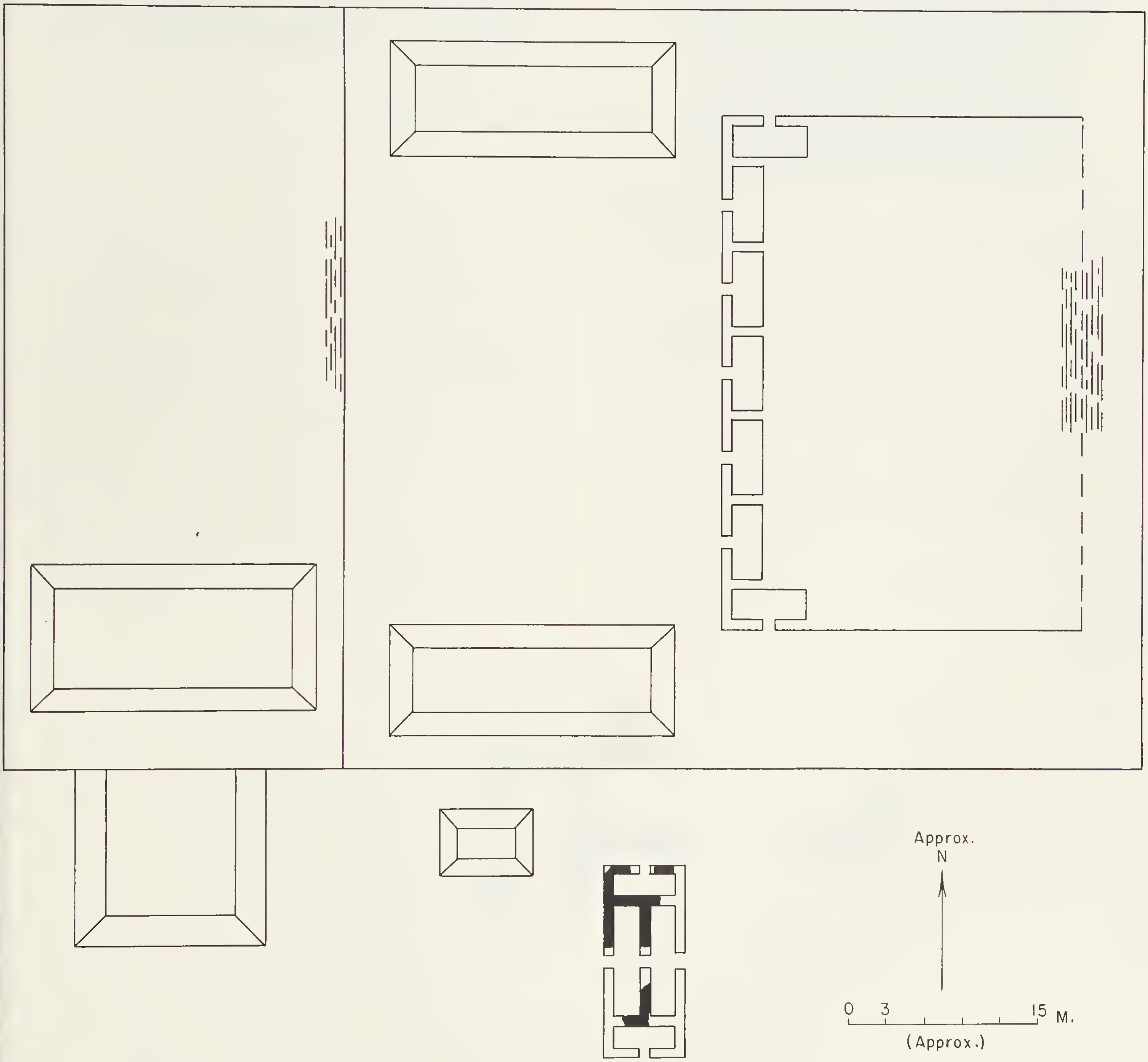


Figure 577. Xulmil. Sketch plan of East Group.

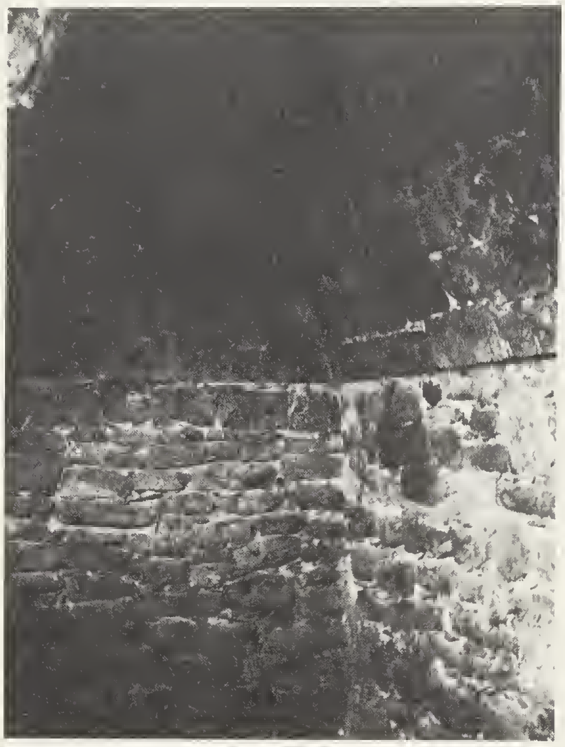


Figure 578. Xulmil, East Group, principal structure. Central room in west range of first story, looking north, and showing crude wall masonry surmounted by well-cut and dressed vault masonry.

from which the former is approached by a stairway. The principal structure, which is a large three-story building, rests on the east side of the east court. It is in an advanced state of ruin, but there seem to be indications of a stairway to the upper stories on the east side, and there are the remains of a range of vaulted rooms of the first story on the west. The primary interest of the building is that the central room of this western range exhibits walls of crude masonry upon which rests a vault of well-cut and faced stone, typical of Puuc construction (fig. 578). Whether or not the walls are of an earlier period than the vault, and the structure thus represents a building sequence that is stylistically significant, is not clear.

Mounds of debris on the north and south sides of the east court mark the remains of fallen vaulted buildings, as do mounds in the lower west court, only one of which is shown on the plan (fig. 577). This southern structure in the west court, judging from cut stone observed in the debris, was of Puuc style. Remains of another fallen structure are just south of it.

A partly standing building south of the east court and off the large substructural platform exhibits the crude masonry characteristic of the presumably early architecture at Oxkintok. The plan (fig. 579a) is similar to that of Structure 3B5 at the other site, but with one rather than two transverse rooms at each end of the building. The medial wall is .80 m thick and outer walls seem to be about .70 m thick. Walls are built of the rough block masonry (fig. 580a) seen in certain presumably early buildings at Oxkintok, and the stepped vaults (fig. 579b) are made of crudely shaped slabs (fig. 580b) quite comparable to the vaulting in Structure 1B1 at that site. There are small windows in the walls below the spring of the vault and sockets that once held wooden beams in the sides of the vaults. There are at present no traces of paneling or tenons to support decoration on the sloped upper facade, but very little of the facade is standing. There seems to have been some sort of cornice molding (fig. 579b).

Some 500–600 m west (281°, magnetic) of the above-described group of ruins, and on the western edge of the Puuc hills, lies the west group of Xulmil. It is a relatively large group of buildings, all of which are fallen. The structures are arranged around three sides of a court that is open on the east side. A large pyramid approximately 15 m high is on the west, and on the south side of the court is a large mound that obviously had once been a building of Puuc architectural style and in whose debris were observed a number of typical decorative elements from the facade.

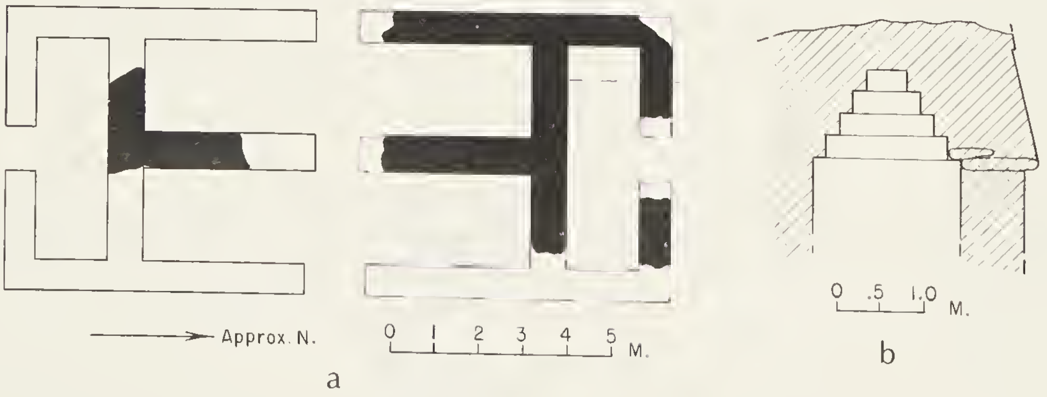
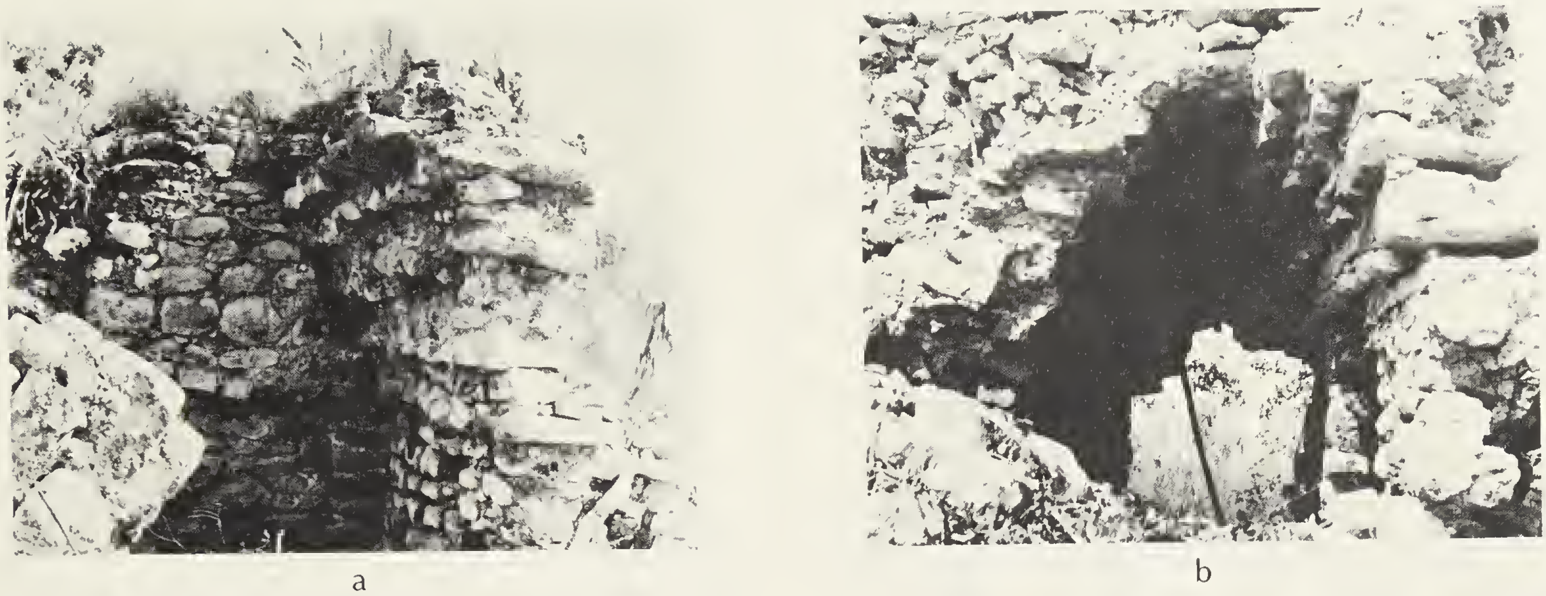


Figure 579. Xulmil, East Group, South Building: a, plan; b, transverse section through north room.


a

b

Figure 580. Xulmil, East Group, South Building: a, west room, looking north, and showing crude wall and vault masonry; b, north room, looking west, and showing rough stepped vaulting.

Chactun

Some 8–9 km southwest of Oxkintok and about the same distance south of Maxcanu.

The direct route from Becal to Maxcanu, which runs almost directly north through the hills, passes first by the hacienda of Chochola and then by Hacienda Chactun. While traveling this road in May of 1935, I observed some large mounds 1–2 km south of Chactun. There appeared to be no standing buildings.

Salisbury (1876, pp. 34–36) visited Hacienda Chactun in 1861 and seems to have seen Oxkintok (Orkintok) and possibly some other ruin site. It is unclear just where he went beside Oxkintok, which he confuses with Maxcanu, but I doubt whether he mentions the ruins near Chactun that I saw.

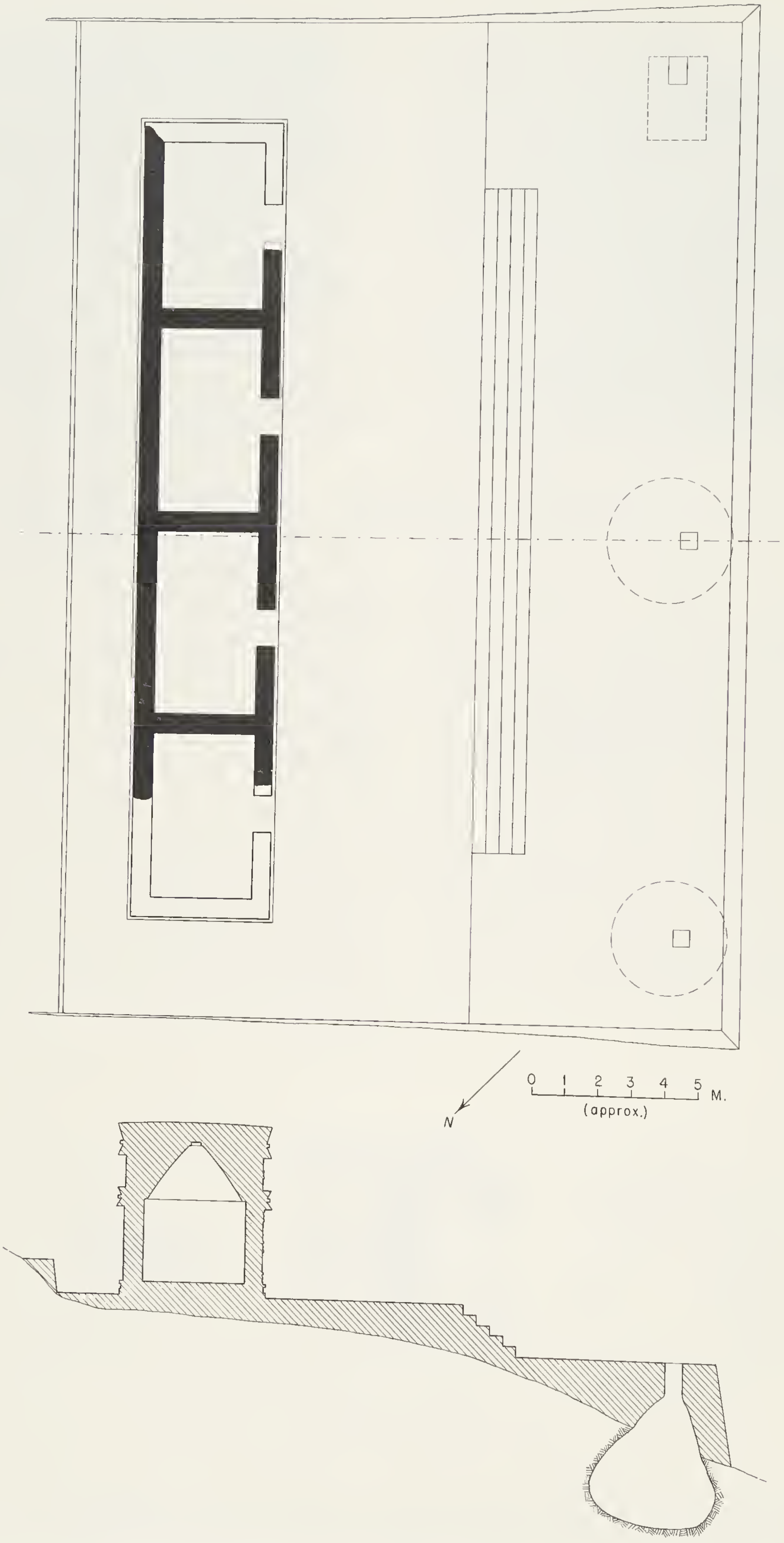


Figure 581. Huntichmul, Half-Column Palace of Four Rooms. Sketch plan and section.

4 · The Southern Ruins

This southeastern extension of the Puuc area and its characteristic architecture begins in the region of Labna and extends southeastward an indeterminate distance where the character of both the terrain and the ancient remains seems to change (frontispiece). The southern reaches of the area are not well known, and it is ended as shown on the map only because farther south one seems to be entering a different archaeological province (see Pollock 1970). Indeed, the last group of sites mentioned here, of which little is known with the exception of Xkichmook, may well be outside the Puuc tradition. Whether the marked thinning out of sites in the southern part of the area represents a true picture of the region or is merely due to lack of exploration, I do not know. I suspect that careful search would produce a good many new sites, but I also believe it not unlikely that the concentration of ruins falls off as one moves away from the Puuc heartland.

Huntichmul; near Labna

This site is referred to by several writers as Huntichmul I, by others simply as Huntichmul. Since there are at least three Maya ruins that carry this name, I am identifying the present site as near Labna, the nearest location for which we have accurate geographical coordinates.

ETYMOLOGY

According to Maler (1895, p. 250), *huntich,* isolated object that stands free of other things; *mul,* ruin mound; *huntichmul,* a ruin pyramid with a superstructure still existing and standing by itself. Seler (1916, p. 65) defines the name as ruined hills. Roys (1935, p. 3) gives Huntichmul =isolated mound, but later preferred free standing pyramid to his earlier definition (personal communication). Variant spelling: Chun-tich-Mool, Chun-tichmul, Huntichmool, Kuntichmul.

SITUATION

Not accurately known. Maler (1895, p. 250) locates the ruins some 6 km southwest of Labna. Tulane University (1940, sect. 2) map shows Huntichmul 6 km south of Labna and about the same distance north of Kiuic (Kewick). My notes place the site 2–3 km north, and possibly slightly west of the ranch of Santa Rita, which is some 8–10 km generally south of Labna and about 4 km west of Kiuic.

TOPOGRAPHY

What appears to be center of site lies on floor of valley surrounded by low but steep hills. Outlying structures on hills at north, east, and west.

WATER SUPPLY

No natural water supply known anywhere near site. Chultuns present (see Temple and Palace, below) but in unknown quantity. Modern artificial well at ranch of Santa Rita.

SIZE

Not known, but at the time of my visit I received the impression of a good-sized site. Central group on floor of valley consists of a number of structures and presumably includes Maler's (1895, p. 250) Chief Palace. According to that writer (ibid.), Temple rests some 700 paces northwest of Chief Palace, and Building with the Inscription about 150 paces northwest of Temple. My notes place Temple to west of group on floor of valley and Building with the Inscription slightly north of west. Half-Column Palace of Four Rooms located an unknown distance northeast of central group.

CIVIC PLAN

Plan of site unknown. What appears to be primary concentration of buildings lies on valley floor. Surrounding hillsides and hilltops carry other buildings, but relation of one structure to another and what exists in intervening areas are not known.

REFERENCES

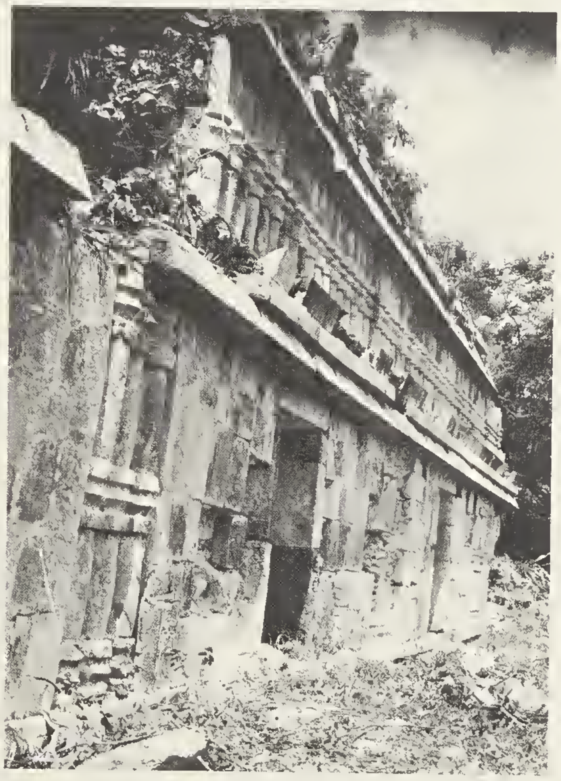
Maler 1895, pp. 250–251.
Pollock 1970, pp. 64–66.
Seler 1916, pp. 65–67, 72.

*

Half-Column Palace of Four Rooms

When we were working at the ruins of Labna in 1932, the late H. B. Roberts made a brief visit to Huntichmul. He concerned himself primarily with the structure that Maler (1895) calls the Half-Column Palace of Four Rooms, and the text and drawings that follow are compiled from his notes. The photographs were also taken by him.

Roberts noted that the structure "is built on the slope of the hill about a quarter of the way up from the valley floor." There is some confusion about the orientation of the building, but Maler (1895) says it faces southwest and I have so indicated on the plan.



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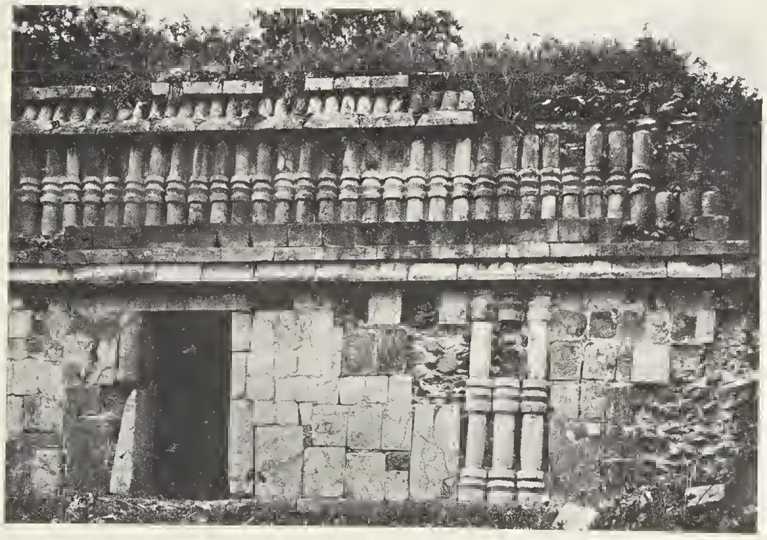


b

Figure 582. Huntichmul. Half-Column Palace of Four Rooms: a, standing central part of facade, looking east; b, central part of facade, looking northeast, and showing doorway to second room from east.

PLAN AND SECTION

See figure 581. Partly restored sketch plan and section.

SUBSTRUCTURE

Stairway. Broad stairway leading from lower to upper terrace in front of building. Length unknown and restored on plan (fig. 581). Risers .30 m, treads .40 m. Construction not recorded but presumably risers of faced stone.

Construction. Apparently typical hillside terracing by means of retaining walls and fill. Walls made "of large blocks of unworked stone faced with cut stone."

Chultuns built partly in fill of terrace, partly in bed rock (fig. 581). Unusual in having square mouths and necks.

"Buried room" 2.5 m long by 1.75 m wide at south corner of lower terrace. Apparently had vaulted roof. Chamber suggests tomb like those at Kabah (see p. 174).

SUPERSTRUCTURE

Plan. See figure 581.

Section. See figure 581.

Base Molding. Three-member molding with continuous row of colonnettes forming middle member.

Walls. Thickness at doorjambs .55 m. Photographs (fig. 582) show well-dressed, fairly well-fitted outer wall stone.

Doorways. Normal Puuc with jamb stones running full width of wall and stone lintels (fig. 582). Probably some narrowing of doorways from bottom to top.

Vaults. Typically curved soffits and small offset courses beneath capstones (figs. 581, 583). Semispecialized vault stone.

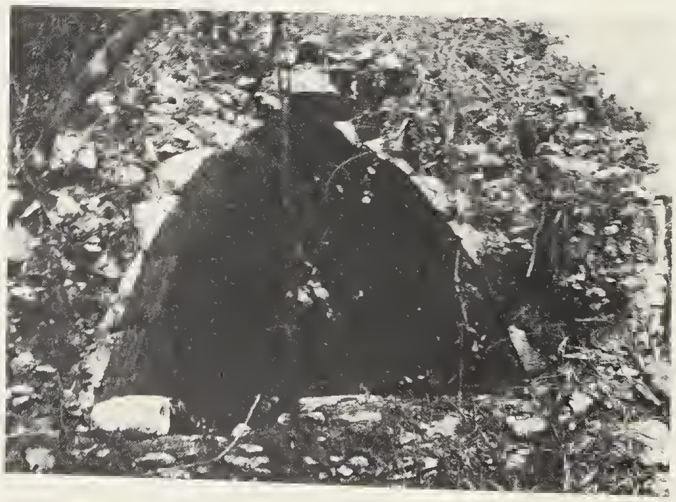


Figure 583. Huntichmul, Half-Column Palace of Four Rooms. Second room from west, looking southeast, and showing vault in section.

Moldings. Simple three-member medial molding (figs. 581, 582). Cornice molding also of three members but lowest member made of two courses, an apron course below and colonnettes above.

Decoration. Lower wall carries banded split columns in groups of three at corners of building and evenly spaced between doorways on main facade (fig. 582; and see Maler 1895, fig. 5). Rear of structure plain except for columns at corners.

Upper facade of banded split columns across front of building. Ends of building fallen so cannot be sure that decoration continued there. Rear facade plain.

Temple

(Chief or Main Temple)

This three-story structure has been described and illustrated elsewhere (see Pollock 1970, pp. 64–66).

Building with the Inscription ?

Two-story building of which only the rear rooms and parts of end rooms of first story are standing and visible without excavation. Also fragment of rear wall of second story.

Structure rests on hill and faced east overlooking hillside that falls off to valley below. Remains of stairway to second story at front of building but cannot make out plan of east rooms or of second story.

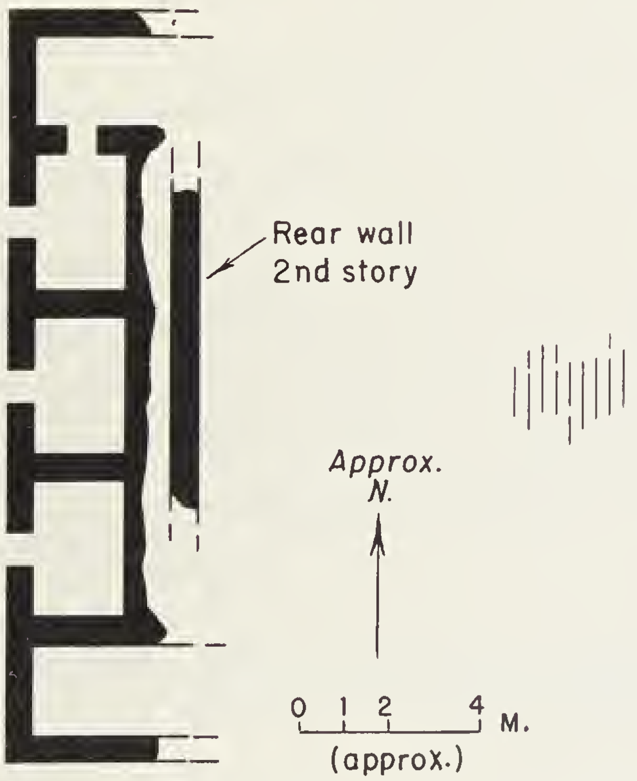


Figure 584. Huntichmul, Building with the Inscription. Sketch plan.

SUPERSTRUCTURE

Plan. See figure 584. Sketched without measurements or compass bearings.

Construction. Moderately well-dressed and fitted wall stone (fig. 585). Doorjambs built of cornerstones with rubble fill forming face of jamb between those stones. Stone lintels. Simple rectangular medial molding that rises over each doorway at west. Upper facade zone slightly overhangs lower wall zone.

Sculptured Lintel (fig. 586; and see Proskouriakoff 1950, fig. 104d). Over doorway of center room at west. Six hieroglyphs on outer face of lintel. Underside of stone carries richly costumed human figure, with head to north and facing west out of doorway. Carving is badly eroded (for comment on style of sculpture, ibid., p. 169).

Chief Palace

Maler (1895, p. 250) describes briefly a badly fallen building that he calls the Chief Palace. He notes that it carried a frieze of colonnettes and that there were fallen mask elements from the main facade. Of buildings surrounding this structure, he notes a frieze of colonnettes on one.

This is presumably the good-sized group recorded in my notes as being on the floor of the valley. Roberts's notes read: "North and west of the site [i.e., Half-Column Palace of Four Rooms] and on the floor of the valley is a very large terrace with the remains of several structures on it. One of these contained eight rooms, the facade had fallen but there were many 'split column' sections lying about. Directly south and on the other side of the valley is what appears to be a large group." Either of these groups could be the one with the Chief Palace.

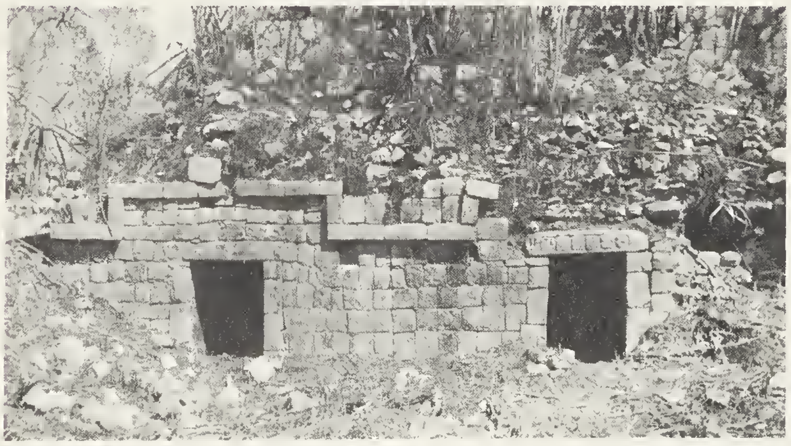


Figure 585. Huntichmul, Building with the Inscription. View of west facade, looking east, and showing north doorway (left) and central doorway (right) with sculptured lintel.

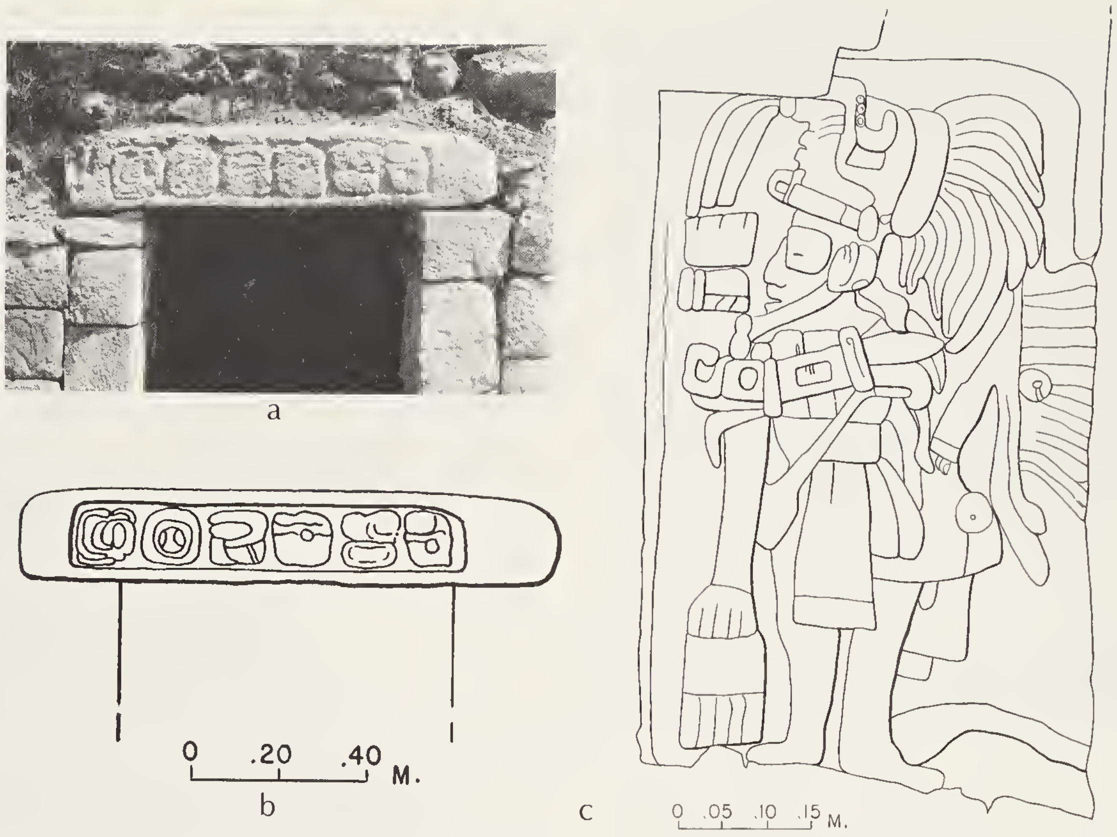


Figure 586. Huntichmul, Building with the Inscription. Sculptured lintel over center doorway at west: a, b, glyphic inscription on outer edge; c, bas-relief on underside of lintel.

MONUMENTS

STELA

Stela (?). Five minutes' walk south of center of site (approx. 0.5 km), on trail to Santa Rita, I observed (1936) a large crude stone, 1.5–2 m high, set on a low platform about 2 m square. Platform and stone gave every impression of being ancient. Candles had recently been burned at foot of stone.

ALTAR

Altar. Typical column altar at foot of stairway to Temple (see Pollock 1970, p. 66).

OTHER SITES

Xcalopec

Shown on Tulane University (1940, sect. 2) map 6 km southwest of Labna and about 5 km west and slightly north of Huntichmul. I have no information on these ruins.

Yaxche-Xlabpak

(Yaxche)

Some 13–14 km southwest of Labna, approximately 12 km west of Huntichmul as shown on Tulane University (1940, sect.2) map, and 2 or 3 km northeast of Yaxche hacienda. Muller (1960, p. 50 and map) shows the site of Yaxche in Campeche, just over the Yucatan border. I suspect that this is the location of Yaxche hacienda rather than the Maler ruins of Yaxche-Xlabpak.

Apparently a good-sized site as Maler (1902, pp. 206–208) mentions seven buildings that seem to be included in four or five architectural groups, some of them evidently spaced some distance apart. At the time of his visit (1887) two structures were in good enough state of preservation to offer worthwhile architectural features, and these he describes in some detail and illustrates (fig. 587; and ibid., fig. 8). By and large, the architecture seems to be typically Puuc. There is considerable use of hilltop and hillside terracing. The vaulted understair passage is present, and second stories, either planned or completed, are common. The columnar doorway is used, as is the typical stone lintel, but in what frequency is not clear. An unusual feature is one example of a vault that rises to a point rather than to the usual capstone; otherwise, vaults seem to be of normal Puuc design. The colonnette is featured in moldings, and the banded split column is used as facade decoration. Considerable areas of red paint were still to be seen at the time of Maler's visit.

REFERENCE

Maler 1902, pp. 206–208.

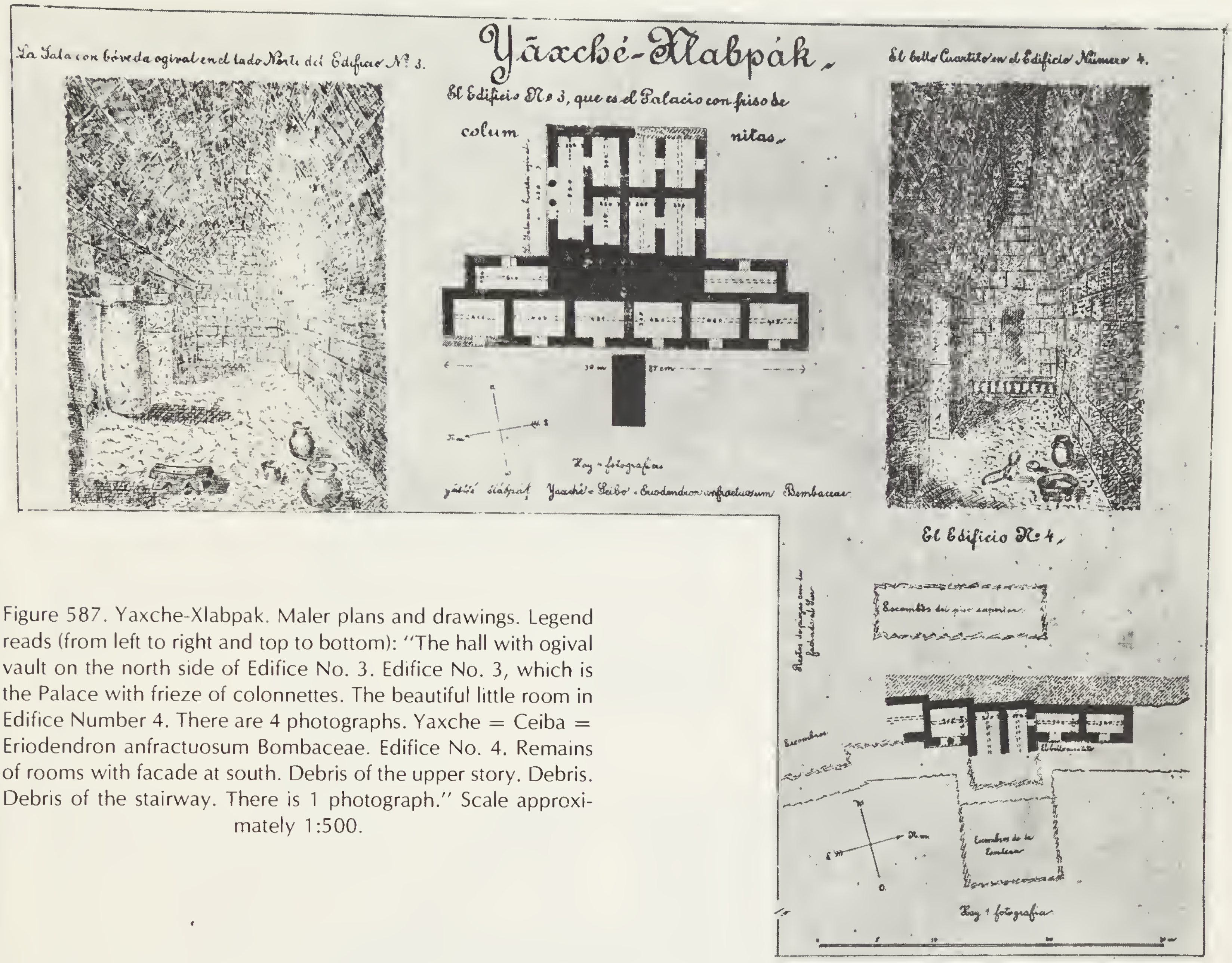

La Sala con bóveda ogival en el lado Norte del Edificio Nº 3.
Yāxché-Xlabpák.
El Bello Cuartito en el Edificio Número 4.
El Edificio Nº 3, que es el Palacio con friso de colum nitas.
30 m 87 cm
Hay 4 fotografías
yāxché xlabpák Yaxché = Seibo = Eriodendron anfractuosum Bombaceae
El Edificio Nº 4.
Escombros del piso superior
Escombros
Escombros de la Escalera
Hay 1 fotografía
O.

Figure 587. Yaxche-Xlabpak. Maler plans and drawings. Legend reads (from left to right and top to bottom): "The hall with ogival vault on the north side of Edifice No. 3. Edifice No. 3, which is the Palace with frieze of colonnettes. The beautiful little room in Edifice Number 4. There are 4 photographs. Yaxche = Ceiba = Eriodendron anfractuosum Bombaceae. Edifice No. 4. Remains of rooms with facade at south. Debris of the upper story. Debris. Debris of the stairway. There is 1 photograph." Scale approximately 1:500.

Chacbolay

ETYMOLOGY

Motul Dictionary (see Martinez 1929, p. 154) gives: *bolay,* generic name of any fierce animal that kills (chac-bolay). Maler (1902, p. 197) says *chacbolai* = a certain very rare little mammal belonging to the cat species. Mariscal (1928, p. 25) quotes Martinez Hernandez: *chac,* red; *bolay,* ocelot (tigrito). Roys (1931, p. 331) identifies chac-bolay as *Felis hernandesii goldmani* Mearns. Hernandez's Jaguar. Variant spelling: Chacbolai.

SITUATION

Approximately 5 km southwest of the village of Xul, 6 km northeast of Kiuic, and about 9 km southeast of Labna.

TOPOGRAPHY

Main structure rests on the artificially terraced top of a small natural hill. No other topographic features recorded.

WATER SUPPLY

No natural water supply known other than rock basins which contain water during rainy season. Maler (1902, pp. 197–199) noted three such basins, or sartenejas, in vicinity, one just south of the principal structure. This last reported by our workmen to be extremely large.

SIZE

Small site consisting of only four or five buildings, so far as is known.

CIVIC PLAN

Apparently a single small group. Two buildings at right angles to each other just east of Castillo or main building. Good-sized pyramidal mound just northeast of Castillo. According to Mariscal (1928, p. 25), Martinez Hernandez observed another mound in front (west) of the Castillo.

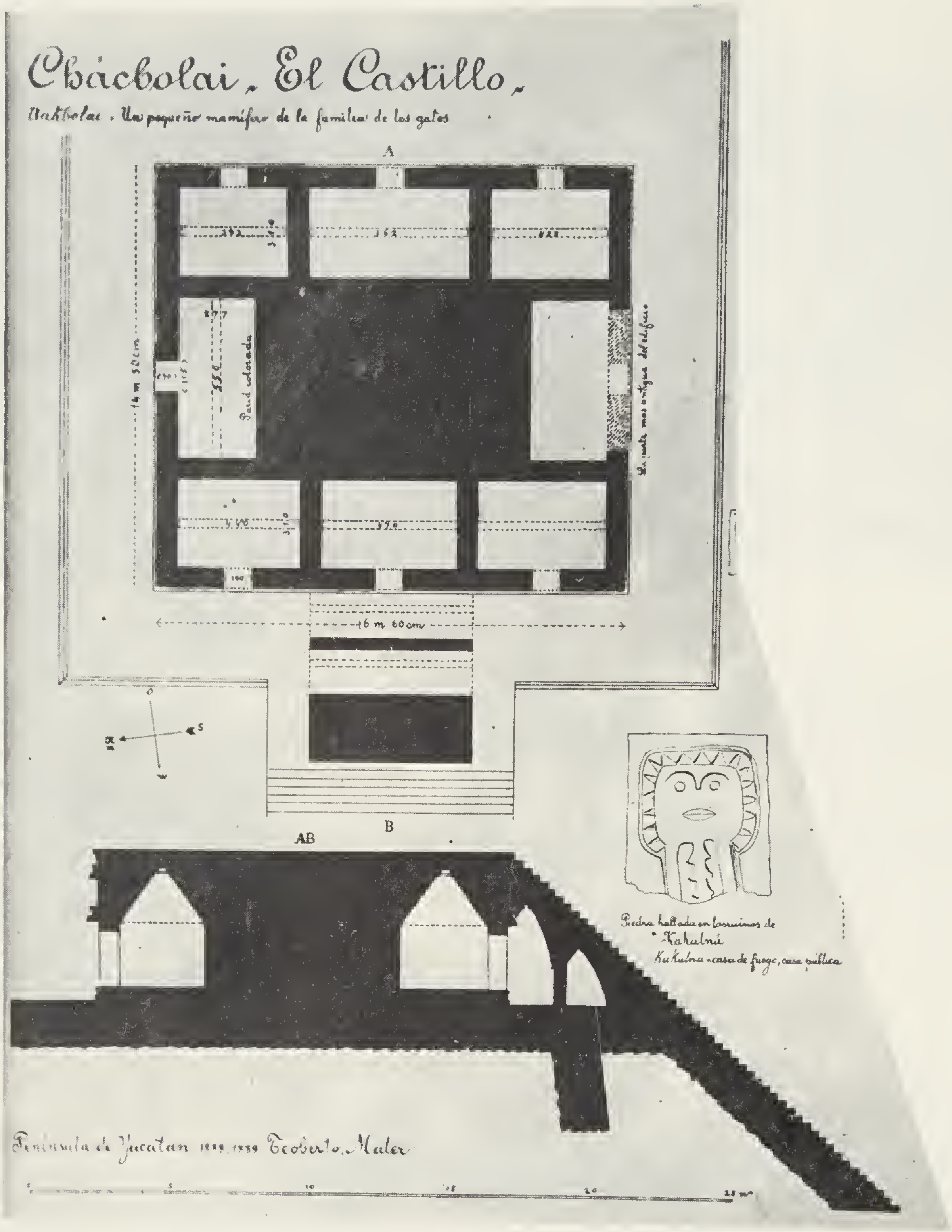

Chácbolai. El Castillo.
Chakbolai. Un pequeño mamífero de la familia de los gatos
A
14 m 50 cm
Pared colorada
La parte mas antigua del edificio
16 m 60 cm
B
AB
Piedra hallada en las ruinas de Kakalná
Ku Kalna - casa de fuego, casa publica
Peninsula de Yucatan 1889 1890 Teoberto Maler
5
10
20
25 m

Figure 588. Chacbolay, Castillo. Maler plan and section. Title: "Chacbolai. The Castillo. Chacbolai = A little mammal of the cat family." Legend in north room: "Red wall." Legend at south: "The oldest part of the building." Drawing of face: "Stone found in the ruins of Kakalná. Kakalná = house of fire, public house." Scale approximately 1:200.

Orientation. Maler shows Castillo facing approximately 8° north of west, presumably magnetic (fig. 588).

REFERENCES

Maler 1902, pp. 197–199.
Mariscal 1928, pp. 23–29.
Reygadas 1928, pp. 187–190.

Castillo

(Main or Principal Building)

PLAN AND SECTION

See figure 588.

SUBSTRUCTURE

Stairway (fig. 588). Maler (1902, p. 197) implies that stairway at front of structure rose from ground level, thus traversing both the natural slope of the hill and the artificial terraces above.

Construction. Maler (ibid.) says that the structure rests on a half-natural, half-artificial mound perhaps 15 m high. He means, of course, that the little hill was artificially built up and leveled at the top. His drawing shows two or three terraces (fig. 588), and he describes the platform upon which the building rests as offering a narrow passage on the west, north, and south sides, but forming an extensive area at the east. My notes carry no mention of the substructure.

SUPERSTRUCTURE

Plan. See figure 588; and Mariscal 1928 (fig. 16). There is nothing in my notes to indicate whether Maler's plan or Mariscal's is the more accurate.

Section. See figure 588 (and ibid., fig. 15).

Elevation. See figure 589a (and Maler 1902, fig. 1). Reconstructed from Maler and Mariscal drawings and from photographs.

Base Molding. Simple course of dressed stone across north, south, and east rooms. Base molding across front and ends of western rooms is of three members, the middle member consisting of colonnettes with a larger colonnette at each corner (fig. 589a).

Stairway. According to Maler (1902, pp. 197–198), stairway that rises to roof of building is continuation of lower, substructural stairway (see Substructure, above). Maler (ibid.) says stairway crosses two half arches (fig. 588). My notes say smaller western passage carried complete vault rather than half vault. Stairway is contemporaneous with construction of west rooms.

Doorways. Entrances to north, south, and east rooms of normal Puuc construction with full-width jamb stones and stone lintels. Jambs of western doorways made of two or three vertical courses (see Mariscal 1928, fig. 17).

Wall Openings. Square and round windows in walls between rooms. Located just below level of spring of vault.

Moldings. Medial and cornice moldings same except for usual outward-leaning coping course of cornice molding (fig. 589a). Colonnettes in second member of each molding are set vertically on facades of north, south, and east rooms, but are sloped on facades and ends of west rooms. Three balls in place of colonnettes at northwest and southwest corners of building (fig. 589).

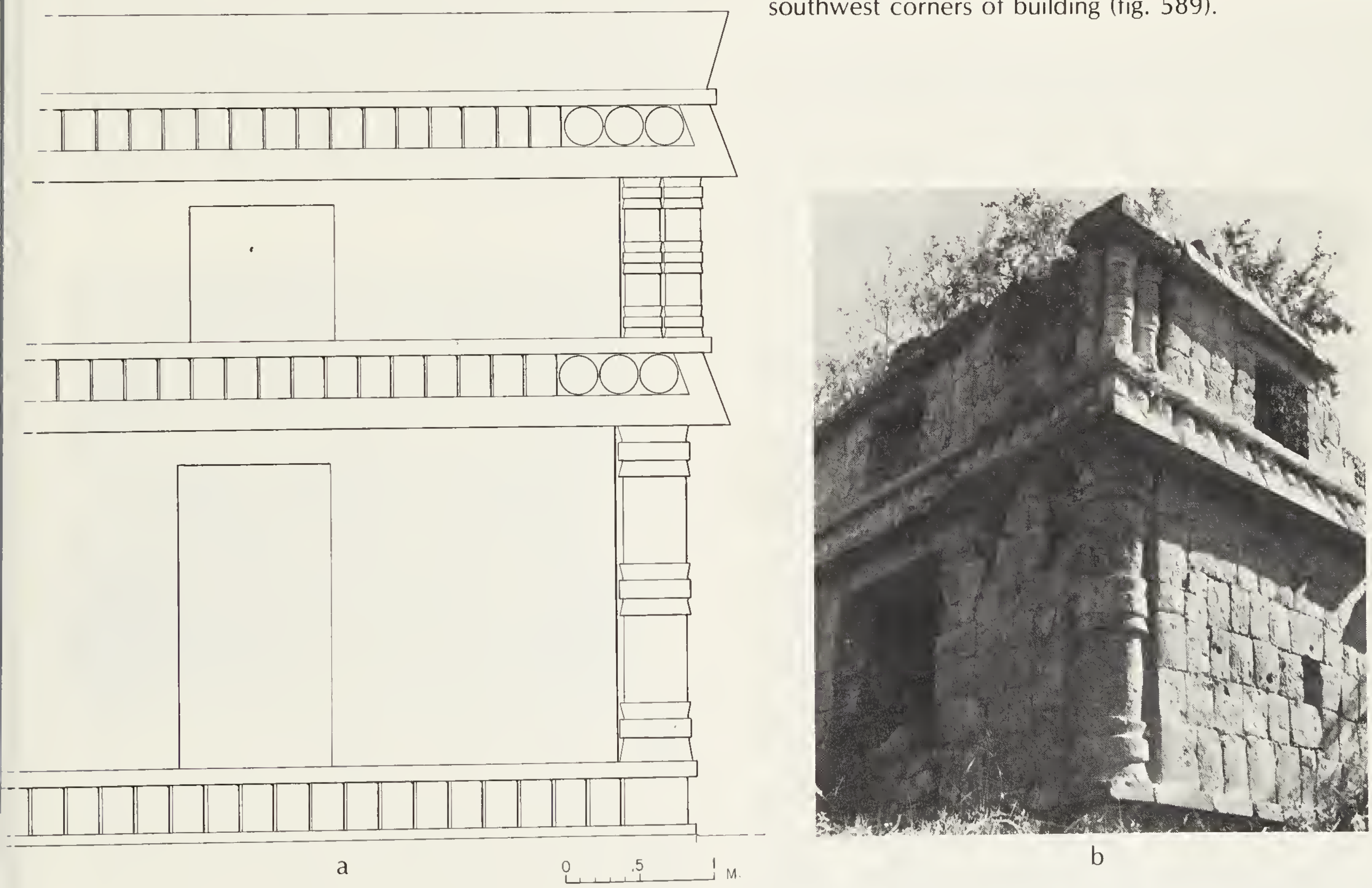


Figure 589. Chacbolay, Castillo: a, restored elevation of south facade at southwest corner; b, southwest corner, looking northeast.

Decoration. Heavy three-quarter banded columns at northwest and southwest corners of building (fig. 589; and see Mariscal 1928, figs. 18, 19). Some question whether there were columns at other corners, Maler (1902, p. 198) apparently believing that there were.

Three banded colonnettes in upper facade zone at corners (fig. 589), and groups of three such colonnettes alternating with plain areas in upper facades of north, south, and east rooms. Northwest and southwest rooms have niches, now without decoration except for traces of red paint, in facade over doorways and at ends (fig. 589).

Maler (ibid.) notes that the rear wall of the north room was painted red.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

According to my notes, east rooms built first, then north and south rooms, west rooms built last. This is contrary to Maler's (ibid., pp. 197–198) opinion that the north and south rooms were built first and later the east and west rooms. He also speculates on there being filled rooms hidden in the solid central core of the structure. I saw nothing to indicate this. It seems obvious, however, that a second story was planned but never built.

East Building

Fragment of simple rectangular medial molding and plain vertical upper facade visible on one of buildings east of Castillo.

OTHER SITES

Kom

Three or 4 km west-southwest of Xul and some 7 km approximately north-northeast of Kiuic.

Reygadas (1928, p. 190) says the site consists of two groups, the first of three buildings with fragments of vaults and moldings preserved, the second, resting on a small hill nearby, made up of several buildings of which one is standing and shows plain walls with three banded columns at each corner and banded columns in the upper facade zone. A photograph (ibid., photo 3) shows a partially standing structure with a doorway spanned by a stone lintel, banded columns at the corner of the building, a simple three-member medial molding, banded colonnettes in the upper facade, and what undoubtedly had been a four-member cornice molding with colonnettes forming the second member.

I examined the site briefly in 1936 on my way from Chacbolay to Kom, and was surprised that so large a ruin had received so little attention. I noted four partly standing buildings and probably at least a dozen mounds. My notes refer to X elements in one molding, and second-story rooms resting above very low, strongly curved vaults, seemingly a risky mode of construction.

REFERENCE

Reygadas 1928, p. 190.

Xul

Approximately 9 km east-southeast of Labna and roughly 25 km west-southwest of Tekax.

Xul seems to have been one of the few pre-Conquest settlements south of the sierra of which we have any record. Then known as Tixul, or Texul, its population was moved to Oxkutzcab (see p. 206, above) in early colonial times (Roys 1957, p. 72). In the nineteenth century Xul prospered, but was a decaying, half-abandoned village when I stopped there in 1936. I saw no evidence of pre-Columbian remains, but Stephens (1843, 2:83–84) and E. H. Thompson (1904, pp. 7–8) both make it clear that the town was built on the site of an ancient city. Stephens (ibid.) mentions a previously existing, but by then demolished, pyramid and sculptured elements built into the walls of modern buildings. Thompson (ibid.) says that the ancient center had been large enough to furnish most of the building material for 30 or more stone houses of considerable dimensions and the large stone church of Xul. He also noted sculptures, one a human head in a serpent's mouth, and several chultuns.

REFERENCES

Stephens 1843, 2:83–84.
E. H. Thompson 1904, pp. 7–8.

Acambalam

According to the Tulane University (1940, sect. 2) map, the site lies about 7 km southwest of Xul, 2 km west-southwest of Chacbolay, 3 or 4 km north-northeast of Kiuic, 3 or 4 km southeast of Huntichmul, and 8 or 9 km south and slightly east of Labna. On the other hand, E. W. Andrews's diary for 1942 reports the ruins to be about 6 km northwest of Kiuic. He places Kiuic west and slightly north of Chacbolay. In 1948, traveling from Santa Rita (south of Labna) to Tabi by way of Santo Domingo and San Joaquin, I passed about 2 km south of Santo Domingo a building said to be part of Acambalam, but at some distance from the main part of the site. The route I traveled lay east of the better known road by way of Labna and Sabacche and, according to my guide, runs north. The locations of Acambalam, Kiuic, and Huntichmul on the Tulane map all seem open to question.

I know of no published description of Acambalam. Andrews writes in his diary (1942): "Acambalam, where we stopped only about 10 minutes, deserves a lot of investigation. It runs at least 1 km along the trail and has 10 or more partly standing buildings and many more large mounds." His photograph of one of the buildings (fig. 590) shows an overhanging, battered upper wall zone that in effect is a great apron molding, surmounted by two courses of stone that form the lowest apron member of an otherwise fallen cornice molding.

As indicated above, I examined briefly a partly standing structure said to be some distance from the center of the site. The building, which is illustrated by Case (1911, pp. 186, 188) and by Totten (1926, pl. 65, 3), consisted of three rooms in line, only the center of which remained standing. The architecture is typically Puuc. A three-member base molding with colonnettes in the middle member is surmounted by a plain lower wall zone. The only standing doorway employs full-width jamb stones and a stone lintel. The inner walls stand at least 2.50 m to the spring of the vault. The medial molding at the rear of the building is of three members, the middle member consisting of groups of 15 colonnettes separated by a step-and-fret design. Only step-and-fret elements remain in the middle member of the medial molding at the front of the structure, and this design may have been continuous on that side. Cornice molding mostly fallen, but probably duplicated medial molding with addition of the usual forward-leaning coping course. Parts of upper facade zone that remain standing are of split columns at both front and rear of building.

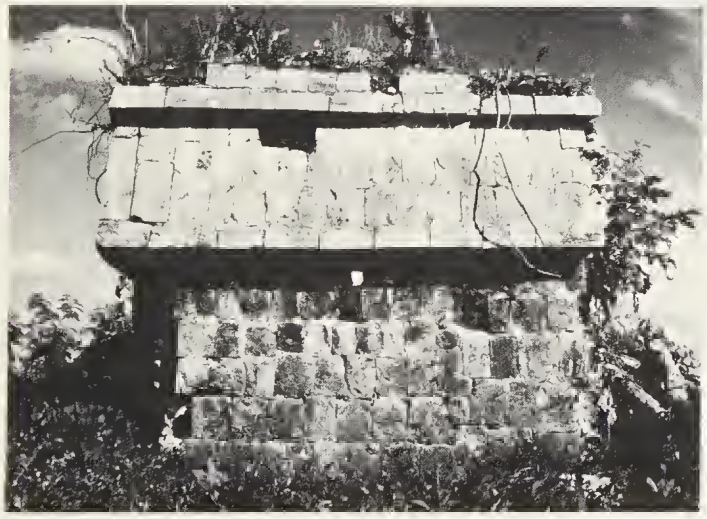


Figure 590. Acambalam, Temple. View of south side, looking north.

Kiuic

ETYMOLOGY

Motul Dictionary (Martinez 1929, p. 517) gives: *kiuic,* market, fair, or market place, or plaza where they sell and buy. Roys (1935, p. 3) says, "The ruins of Kiuic (marketplace) may have been named from a fancied resemblance to a town square, but it is also possible that the city was a noted market in ancient times." Variant spelling: Keuic, Kevic, Kewic, Keuick, Kewick, Kewich.

SITUATION

According to Tulane University (1940, sect. 2) map, Kiuic lies 10 or 11 km southwest of Xul, about 11 km south of Labna, and some 6 km south of Huntichmul. This pretty well follows the distances and directions in my diaries, except that Huntichmul should lie more northwest than north of Kiuic. Andrews, as mentioned above, places Kiuic west and slightly north of Chacbolay, which locates the site more west than southwest of Xul (see Acambalam, above).

TOPOGRAPHY

I have no record of this feature. My memory is that the site occupies relatively level terrain surrounded by hills. Referring to the ranch some 4 km west of Kiuic, my diary (1932) says that the country about Santa Rita is very hilly and quite similar to Sabacche with kancab deposits in the valleys. Kancab is the common red earth found throughout the Puuc region and over much of the northern Yucatan peninsula.

WATER SUPPLY

Stephens (1843, 2:77–78) visited, but did not explore, a natural cave near the ruins that the local inhabitants thought led to water, and he saw an aguada about a league (4 km) distant that was reported to have stone embankments, presumably ancient. Along the trail from Santa Rita to Kiuic I observed three large sartenejas, or rock basins, with water in them, and I have no doubt that such basins abound in the region (see Chacbolay, above). Although my notes make mention of only one chultun, I assume these cisterns are not infrequent in the ruins. There is a modern artificial well at the village of Kiuic, about 1 km south of the ruins, and at the ranch of Santa Rita some 4 km west of the site.

MAPS

I am indebted to Dr. Heinrich Berlin of Mexico City for calling my attention to, and obtaining a photograph of, the previously unpublished map of the ruins of Kiuic given here (fig. 591). I quote from Dr. Berlin's letter to me:

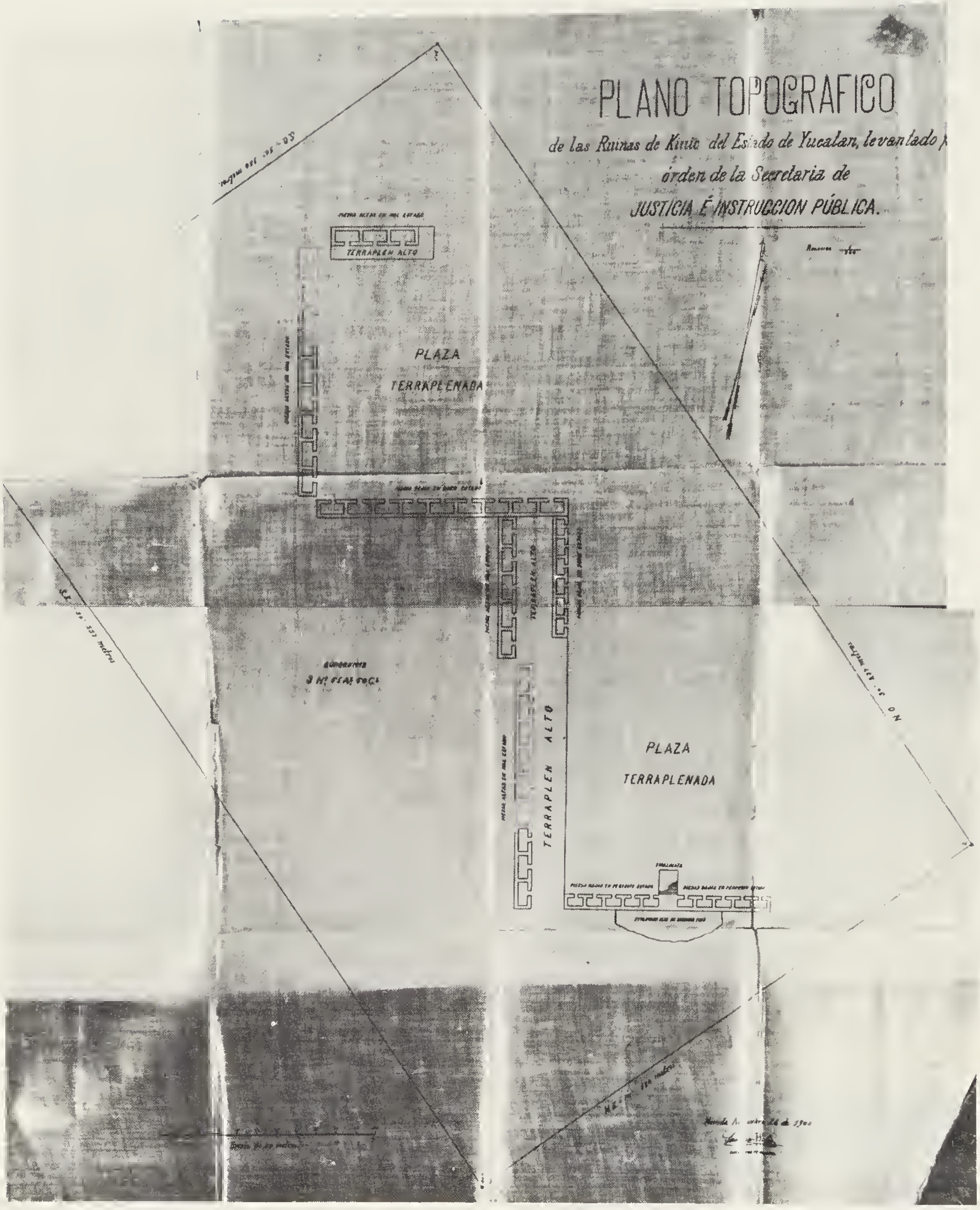

PLANO TOPOGRAFICO
de las Ruinas de Kiuic del Estado de Yucatan, levantado p
orden de la Secretaria de
JUSTICIA É INSTRUCCION PÚBLICA.
TERRAPLEN ALTO
PLAZA
TERRAPLENADA
TERRAPLEN ALTO
TERRAPLEN ALTO
PLAZA
TERRAPLENADA

Figure 591. Kiuic, Group 1. Map by Santiago Bolio. Courtesy Heinrich Berlin.

> During my investigations in the National Archives here [i.e., Mexico City], I came recently across an expediente dealing with the ruins of *Kiuic, Yucatan.* No description at all is given of them, but a nice *plan* of the buildings by Santiago Bolio, who then was inspector de ruinas. The plan is dated 1900, November 28, and was made by Bolio to have these buildings form definitely federal property . . . .

The Bolio plan seems to include only that part of the site that I label Group 1 in my sketch map of the ruins (fig. 592), and it differs from mine in important details. Although my map is of the sketch variety, which means measurements, distances, and directions are only approximate, I am inclined to trust the plans of buildings, where given, over those given by Bolio.

SIZE

Sketch map (fig. 592) covers an area approximately 450 m east-west by 300 m north-south, but there has been no exploration beyond that area and the ruins may be considerably more extensive. There are, for example, ancient remains in the village or ranch of Kiuic, about 1 km south of the main site (and see Stephens 1843, 2:68–69). There may also be undiscovered structures that lie within the area of the map.

CIVIC PLAN

The site is too little explored to give any clear understanding of the civic plan. The almost surely incomplete map (fig. 592) shows a typically scattered distribution of groups

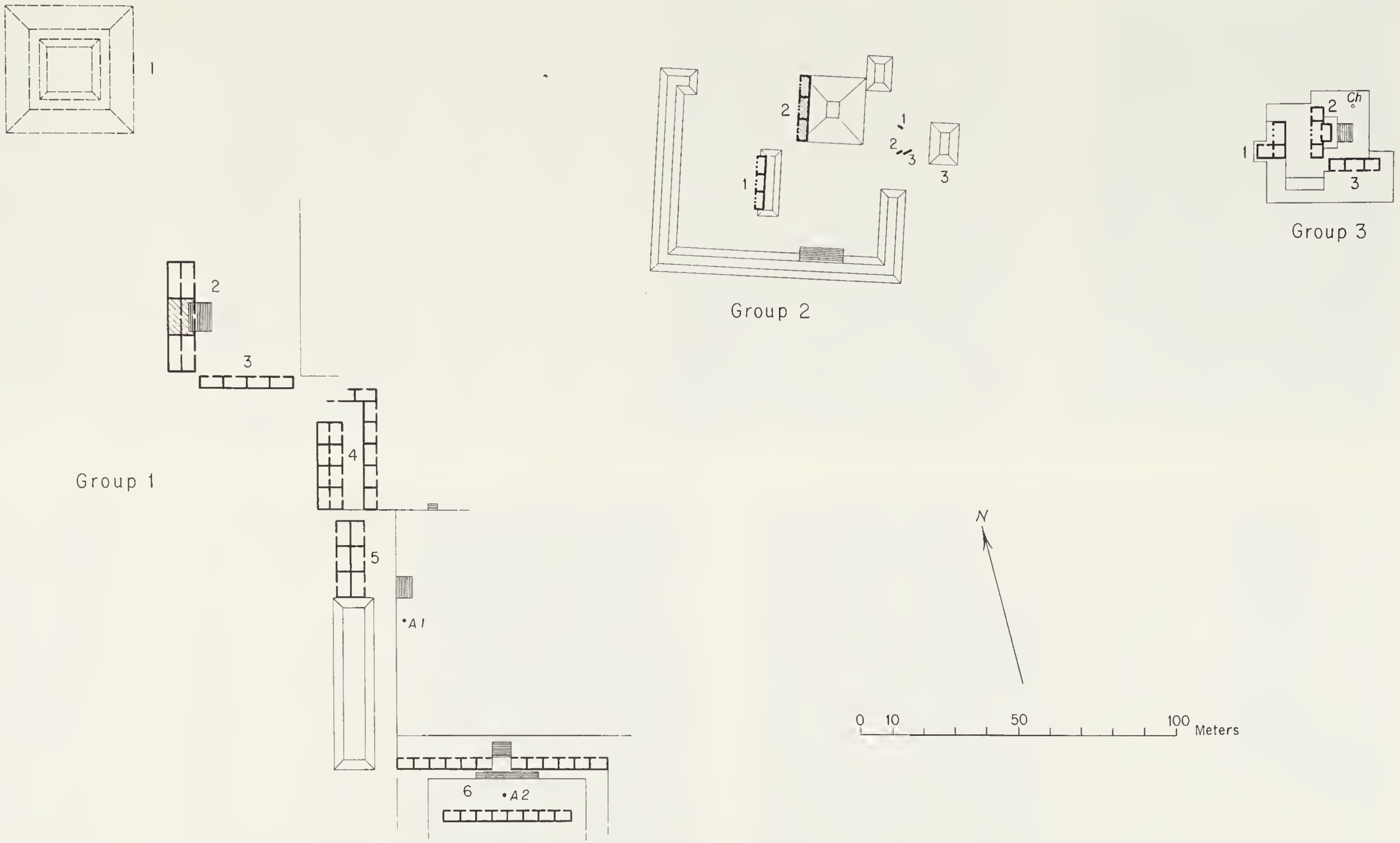


Figure 592. Kiuic. Sketch map of ruins.

of buildings with large vacant spaces between. The closed courtyard is present, as are a number of instances of contiguous and connecting courts, features that are normal in Puuc sites. I have the impression that the largely enclosed Group 2 with its pyramid temple and stelae is the religious and ceremonial center of the city, but a fully developed plan of the site might change that idea.

Orientation. Bolio plan (fig. 591) shows north-south axes of structures in Group 1 as 10° west of true north and 15°20′ west of magnetic north. According to my notes and plan (fig. 592), north-south axes of structures in Groups 1 and 3 fall 8° east of north, magnetic, or approximately 15° east of true north, and in Group 2 11° east of north, magnetic, or approximately 18° east of true north. Orientation based on four compass readings in Group 1 and one each in Groups 2 and 3. It is almost universal practice for buildings in the Puuc area to be oriented so that one axis falls somewhat east of north, and I believe my map to be more accurate in this respect than Bolio's.

REFERENCES

Mariscal 1928, pp. 31–37.
Reygadas 1928, pp. 191–197.
Stephens 1843, 2:68–78.

GROUP 1

This elongated arrangement of artificial terraces and buildings seems to face primarily to the east and secondarily to the north, from which directions the group is approached (fig. 592). It is quite possible that the assemblage of structures was purposely oriented to face Group 2 with its pyramid temple and monuments.

I have no notes on the extensive substructural terracing of this group, other than that Structures 5 and 6 rest on platforms several meters higher than those of Structures 2 and 3 (fig. 592). It is my impression that the natural terrain rises slightly to the west and somewhat more steeply to the south, thus influencing the general disposition of the buildings in the group. There is some question whether the large elevated quadrangle indicated as Structure 1 on the map should be included in Group 1. Its location and dimensions are only approximate.

Altars 1 and 2, the only ones known from Kiuic, were found in this group (see Monuments, below).

Structure 1

This completely fallen building or complex of buildings was not studied in any detail. It was observed and noted only as a large mound with an enclosed courtyard on top. The remains possibly represent an architectural complex similar to the numerous quadrangles at Uxmal, but that interpretation is purely conjectural. The carved stone shown in figure 593 was found on top of the mound.

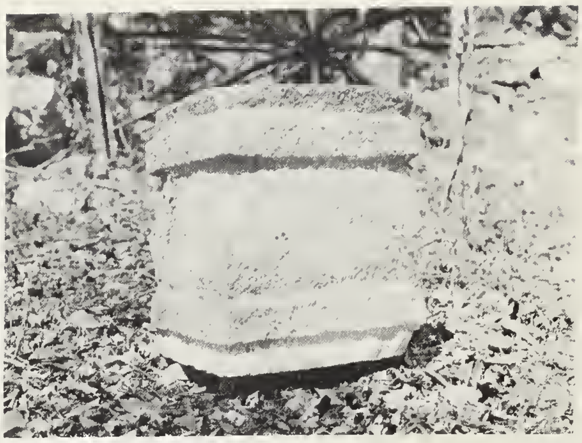


Figure 593. Kiuic, Group 1, Structure 1. Carved stone on top of mound. Scale approximately 1:10.

Structure 2

Badly fallen two-story building. Upper story completely fallen.

SUPERSTRUCTURE

Plan. See figure 592.

Construction. Good-sized wall niche at north end of southwest room (fig. 594a). Built in secondary transverse wall that covers original wall between southwest and west central rooms. Niche uses capstones of vault as ceiling. Extraordinarily flat vaults in lower story (fig. 594b). Capstones in one room seem to function as keystones in true arch. Upper story apparently employed colonnettes in one member of base molding.

Decoration. Fallen fragment of upper facade of lower story carries split column decoration. Mask elements, a snout .82 m long and an ear plug .24 m square (fig. 595), in fall of second story (and see Str. 3, below).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Rear central room of first story filled secondarily, and front central room probably filled. Fill undoubtedly to support second story. Secondary transverse walls across south end of northwest room and north end of southwest room. These walls laid over original transverse walls may have been in connection with building of second story or may have been added support for extraordinarily flat vaults.

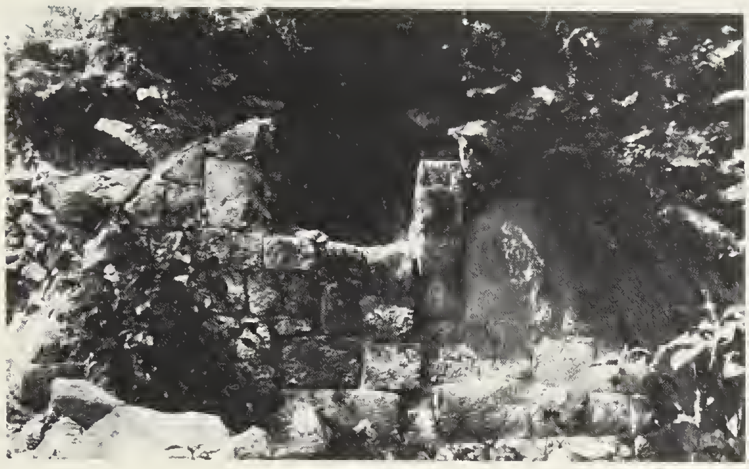
Structure 3

SUPERSTRUCTURE

Plan. See figure 592.

Section and Elevation. See Mariscal 1928 (fig. 20).

Construction. Typical three-member base molding with colonnettes in middle member (fig. 596b). Traces of small platforms that formed step in front of each doorway. Typical Puuc doorways with full-width jamb stones, stone


a

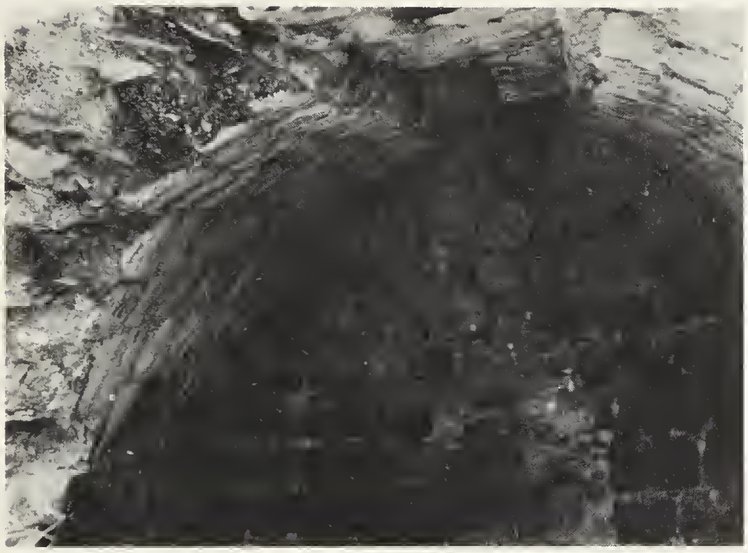

b

Figure 594. Kiuic, Group 1, Structure 2: a, niche in end of vault of southwest room, looking north; b, lower story vault.

lintels, and slight widening of doorway opening from top to bottom (fig. 596b). Strongly curved vault faces and rather specialized vault stone (fig. 596a). Two-member medial molding, the lower-apron member made of two courses of stone, the upper course carrying colonnettes in groups of three, separated by plain areas (fig. 596b). Cornice molding the same, presumably with addition of usual outward-leaning coping course.

Decoration. Groups of three split columns in otherwise plain upper wall zone (fig. 596b). Split columns coincide with placement of colonnettes in medial and cornice moldings (see Mariscal 1928, fig. 20).

Several "fillet" elements (linked circles) typical of those used across brow of mask lying loose in one room. May come from second story of Structure 2.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Remains of secondary transverse wall, apparently with doorway near its center, in one room. Wall stood at least to half height of spring of vault and possibly to spring or higher. One jamb stone of doorway still in position.

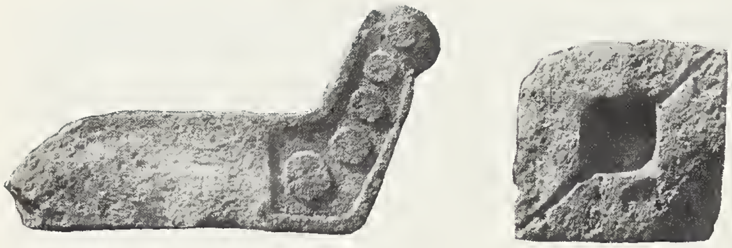
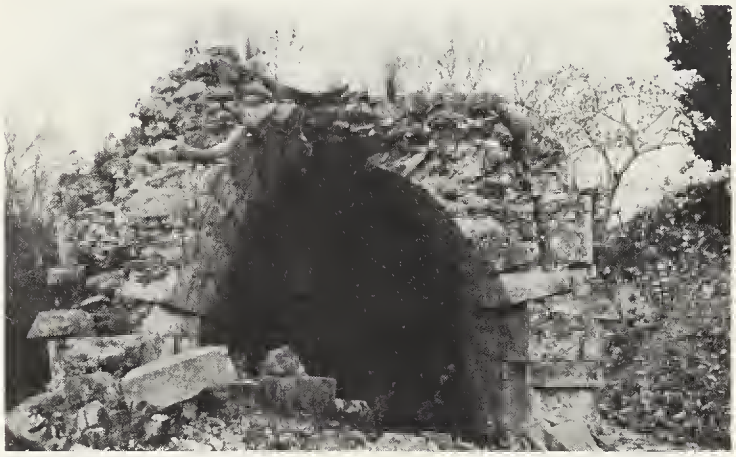


Figure 595. Kiuic, Group 1, Structure 2. Mask snout and ear plug from debris of second story.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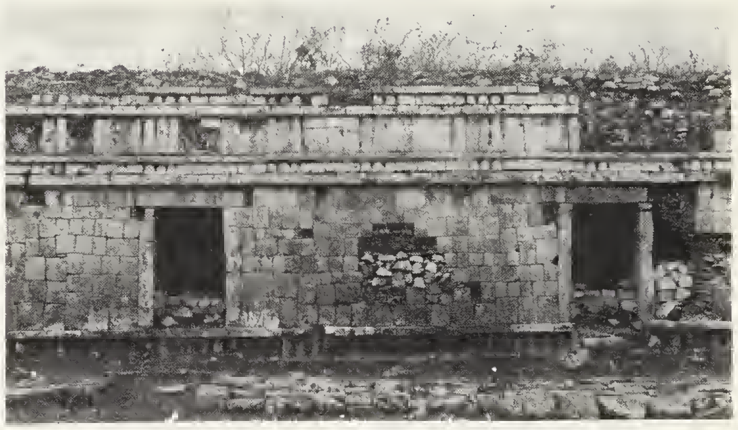

b

Figure 596. Kiuic, Group 1, Structure 3: a, east room, looking west, and showing vault in section; b, north facade, looking south

Structure 4

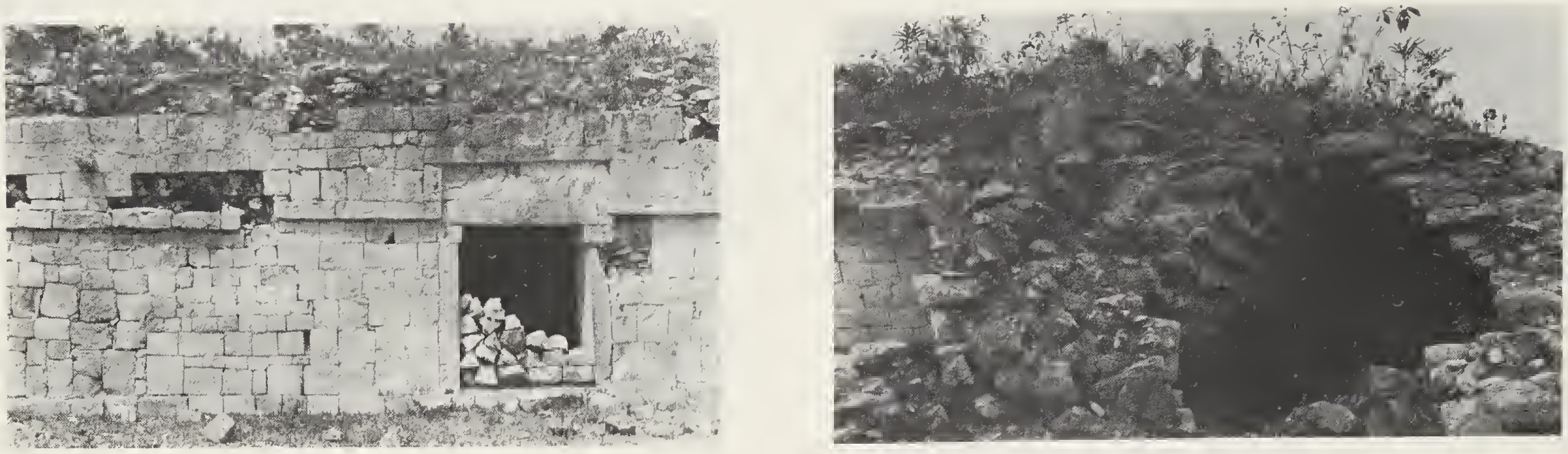
Badly fallen. Building seems to consist of a lower and an upper story, but latter, which is almost totally fallen, might be a separate structure at a higher level. Approach to upper range not apparent.

SUPERSTRUCTURE

Plan. See figure 592.

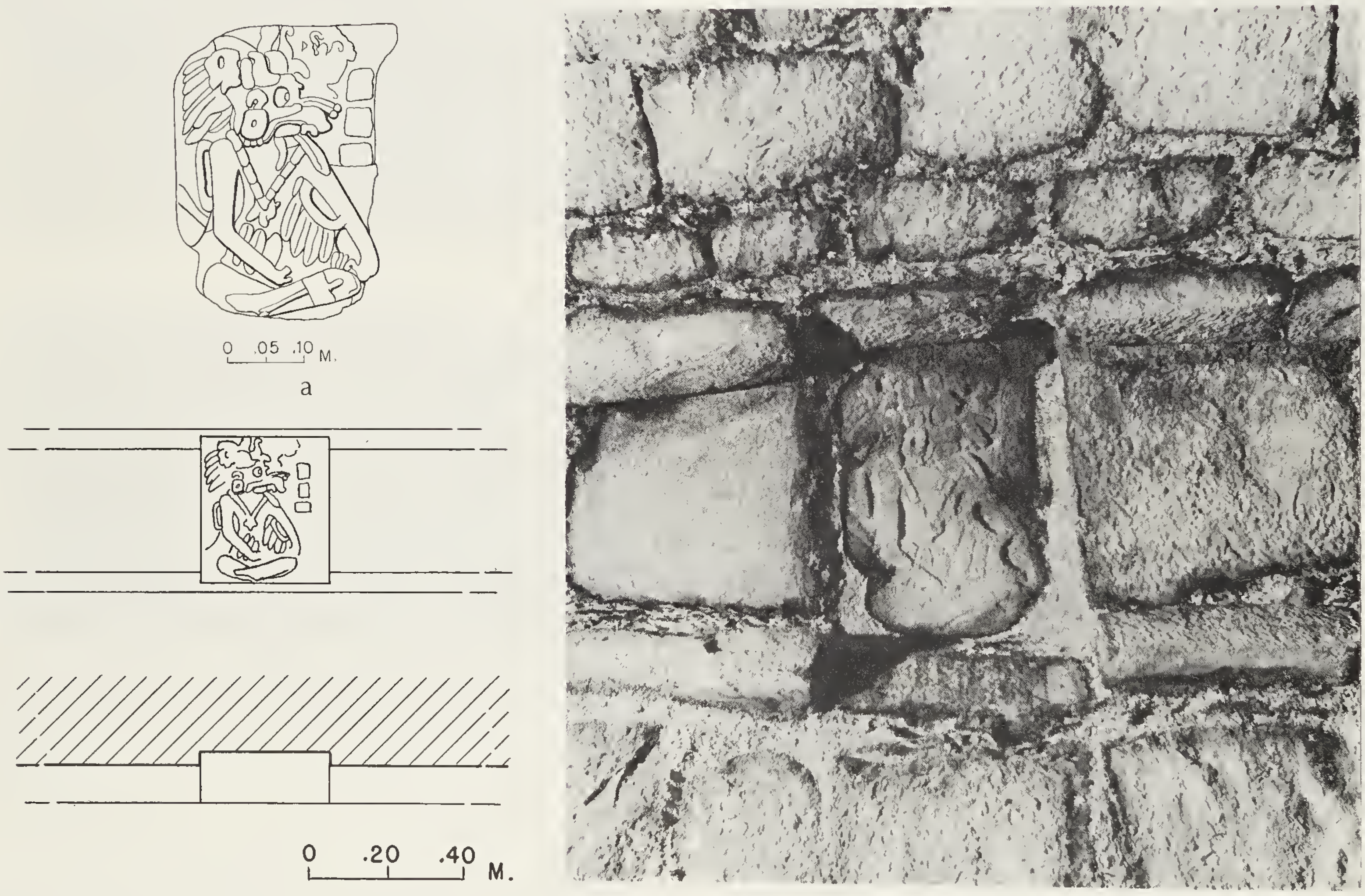
Base Molding. Simple course of dressed stone on south wing. Base molding on north wing buried.

Doorways. Only standing doorway in south wing employs large single stone in each jamb (fig. 597a). Jambs


a

b

Figure 597. Kiuic, Group 1, Structure 4: a, east facade of south wing; b, east room of north wing, looking west, and showing vault in section.



a

c

b

Figure 598. Kiuic, Group 1, Structure 4. Carved capstone in south wing: a, drawing of bas-relief; b, capstone in place; c, elevation and section of top of vault showing inset position of capstone.

topped by corbels that support stone lintel. Jambs of partly fallen doorway farther south in south wing are of cornerstone variety, with mortar and rubble fill forming face of jamb between cornerstones.

Jambs of east doorway in north wing are built of wall stone.

Vaults. Those of south wing wide (2.5 m) in proportion to height (1.30 m) and with strongly curved soffits.

Vault of east room of north wing built of undressed slabs laid in overlapping courses with a good deal of mortar between (fig. 597b). Ten courses on south side of vault, nine on north. Courses run .10–.15 m in height. Gives impression of stepped vault but enough stucco remains to show that vault faces were plastered over so as to form smooth surfaces. This room and vault apparently contemporaneous with south wing.

Moldings. Upper facade visible only on south wing. In place of usual medial molding, entire upper zone of facade overhangs lower wall zone (fig. 597a). Overhang is at higher level over doorway. This seems to parallel custom seen elsewhere of simple rectangular medial molding rising over doorways (e.g., see figs. 54–55, 134, 135a).

No cornice molding visible.

Decoration. Tenon, presumably to support carved stone or stucco decoration, in upper facade zone of south wing (fig. 597a).

Carved capstone at center of vault of room with standing doorway in south wing. Carving shows seated human figure wearing mask (fig. 598a, b; and see Mariscal 1928, fig. 21). Three very small undeciphered hieroglyphs in upper right-hand corner. Carved capstone set at slightly higher level than other capstones, and small corbels or projecting courses' under capstones set wider apart at carved capstone (fig. 598b, c). Although a number of painted capstones are recorded from the northern Maya area, carved capstones are relatively rare (but see pp. 304, 327, 382, 392).

Structure 5

Badly fallen building of which only fragments of the northern rooms are standing. There has been considerable fall since Stephens's (1843, 2:72–76) time, some of it undoubtedly occasioned by his excavations, and the right (north) half of the fragment of principal facade that stood in 1932 had fallen by the time of my second visit in 1936.

SUPERSTRUCTURE

Plan. See figure 592. Some question as to location of doorways in rear (west) rooms. Doorway to center west room seems surely as shown on plan, but doorways to other two west rooms could have been in medial wall.

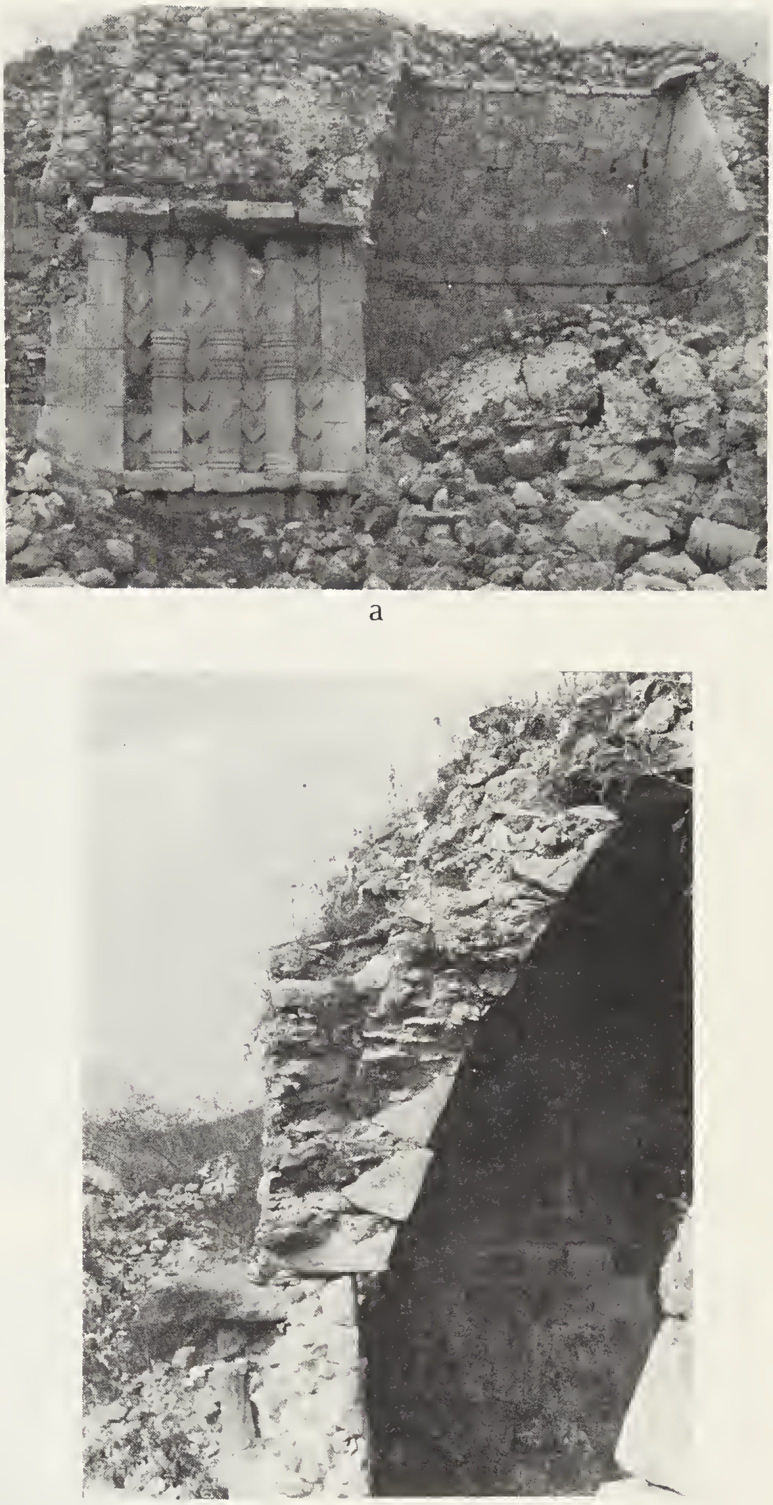
Section and Elevation. See Mariscal 1928 (fig. 22).

Base Molding. Large three-member molding with groups of colonnettes, probably three in number, alternating with plain zones in middle member (see Case 1911, p. 96).

Walls. Outer facing stone very large and beautifully cut and fitted (fig. 599a).

Wall Projections. Cordholders of ring variety in west center room. Two on rear wall below vault spring, one inside and north of doorway.

Vaults. Very large. About 2.75 m floor to spring, 2.50 m spring to offset course below capstones, 3.25 m


a

b

Figure 599. Kiuic, Group 1, Structure 5: a, remaining fragment of principal facade, looking west; b, east side of vault, looking south, and showing vault in section.

wide. Sides tend to be flat rather than curved. Mixture of semispecialized and specialized vault stone (fig. 599).

Moldings. Only lowest course of medial molding still in place. Huge stones about 1 m deep, .22 m high, and with overhang of .50 m carry apron bevel (fig. 599).

Decoration. Pleasing design of banded split columns alternating with diamonds occupies lower wall zone of eastern facade (fig. 599a; and see Stephens 1843, 2:72, and Case 1911, p. 96). Stone work beautifully executed.

Painted capstone removed from room in this building by Stephens (1843, 2:73–76). Stephens's drawing shows human figure in dancing posture and surrounded by hieroglyphs. I do not know the present whereabouts of this stone.

Structure 6

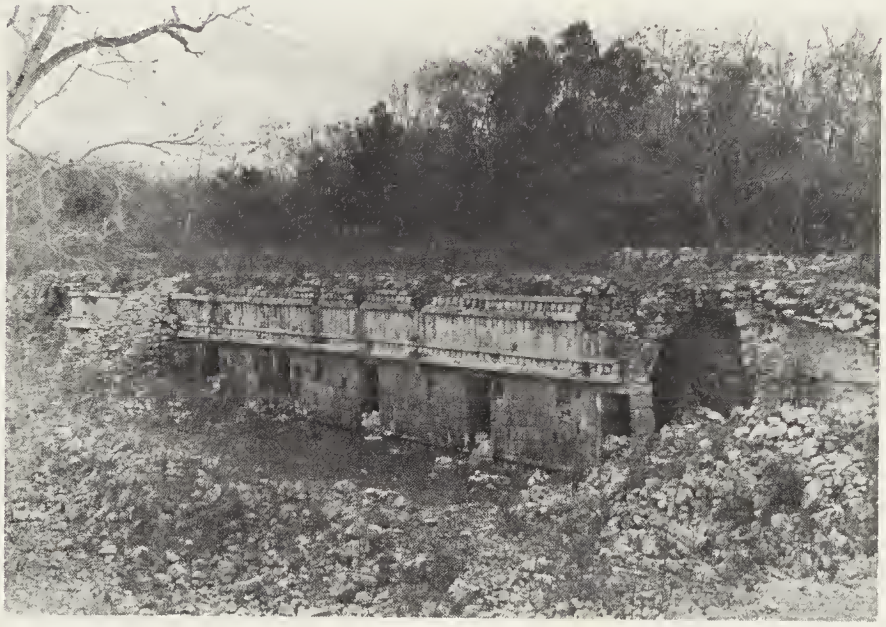
(Nohochpak)

Probably a three-story building, although third story, which is not shown on plan (fig. 592), is problematical. Very little left of second story, and only first story sufficiently preserved to offer much architectural detail (fig. 600).

SUPERSTRUCTURE

Plan. See figure 592. Problematical third story omitted.

Construction. Typical three-member base molding with colonnettes in middle member on first and second



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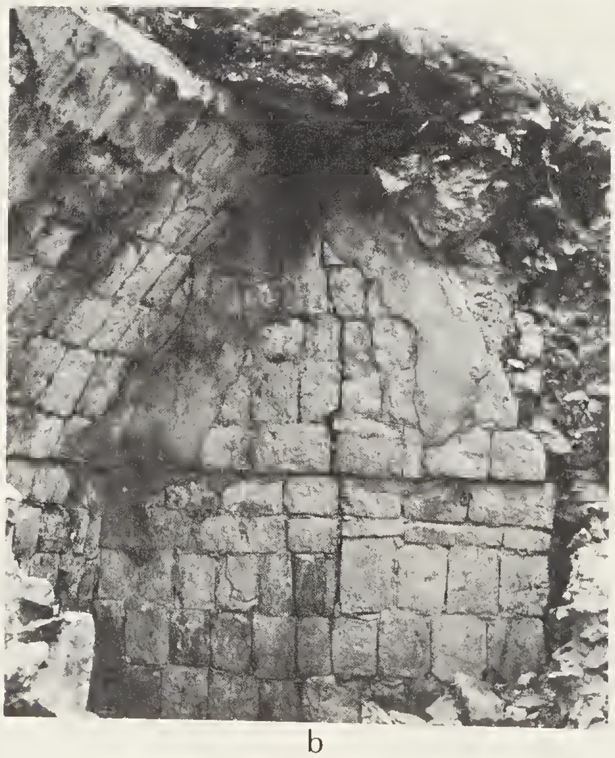


b

Figure 600. Kiuic, Group 1, Structure 6: a, first story, looking southeast; b, room east of stairway, looking west, and showing remains of vault.

stories. Stairway leading to roof of first story seems contemporaneous with that structure. First-story vault faces are somewhat curved (fig. 600b), and vault stone of semi-specialized variety. Medial molding on first story made of apron member, colonnettes, and rectangular string course (fig. 600a). Cornice molding same, with addition of usual outward-leaning coping course (see Marquina 1951, photo 347).

Decoration. Split columns in upper facade zone of first story (fig. 600a).

GROUP 2

I have few notes on this badly preserved group of buildings, other than those dealing with Structure 1. I was able to make nothing of the structures that border the group on the south and west (fig. 592). Presumably some of them were vaulted buildings. I also cannot say in what direction the group faced or from what direction it was primarily approached. The orientation of Structure 2, apparently a temple pyramid and the only one at the site, might give a clew to the problem, but I was unable to ascertain in what direction the pyramid faced. My one compass reading here gives the north-south axis of Structure 1 as 11° east of north, or approximately 18° east of true north. Should the other buildings in the group follow this reading, a situation that is assumed in the plan (fig. 592), the difference in orientation from Groups 1 and 3 might suggest a different period of construction.

Stelae 1–3 lie in the court between Structures 2 and 3 (see Monuments, below).

Structure 1

A great pile of fallen debris lies at the east side of this building. One might assume that this debris marks the remains of vaulted rooms. If so, they were apparently entered from the east. The description below deals exclusively with the western rooms (fig. 592).

SUPERSTRUCTURE

Plan and Elevation. See figure 601. Elevation partially restored.

Section. See figure 602.

Base Molding. Three-member molding of type more commonly used as medial molding (figs. 601, 602).

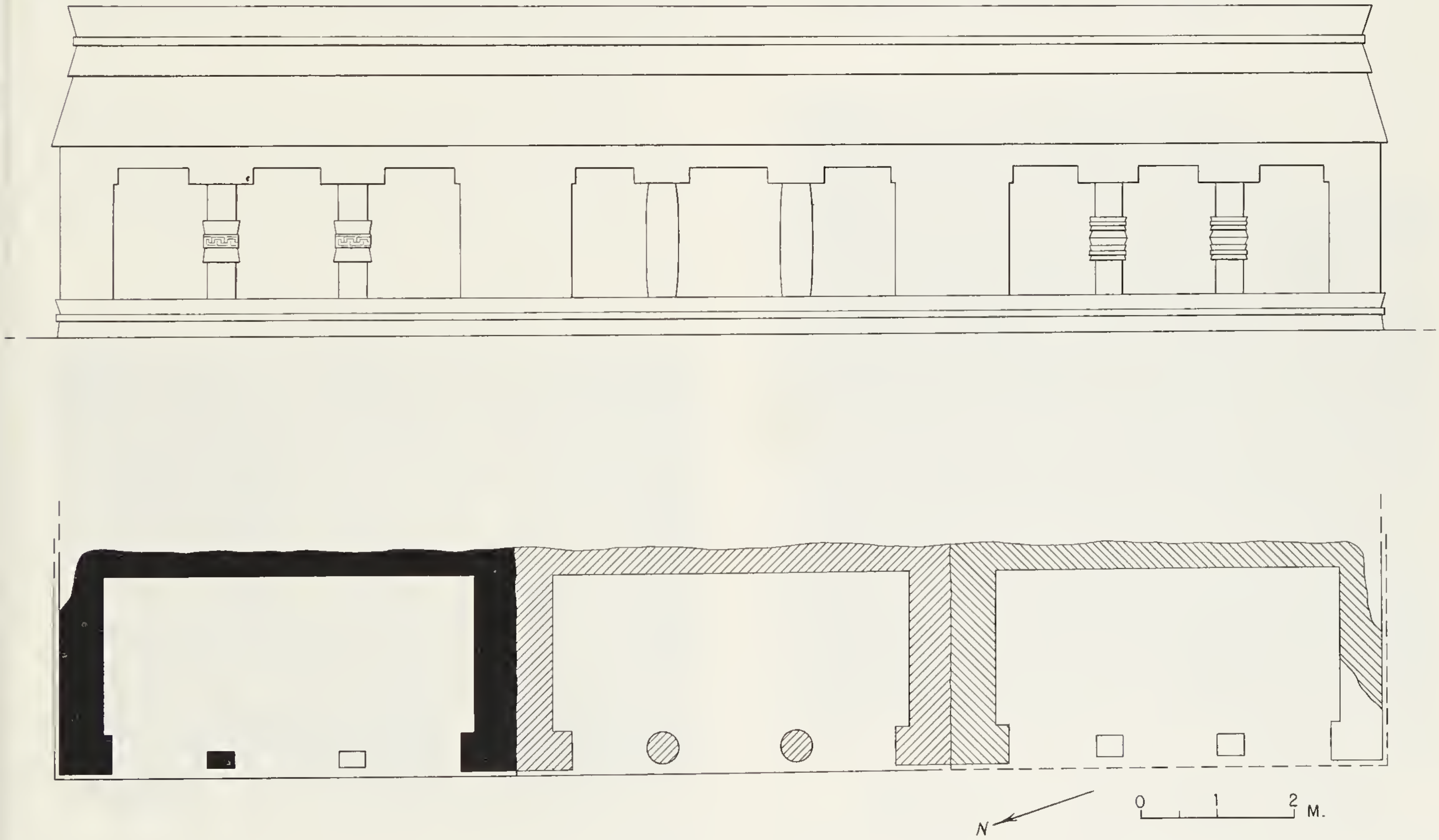


Figure 601. Kiuic, Group 2, Structure 1. Restored elevation and plan of western range of rooms.

Walls. Front walls .50 m thick are merely jamb stones. North end wall .55 m thick. Transverse walls between rooms, which are double walls, 1.0–1.10 m thick.

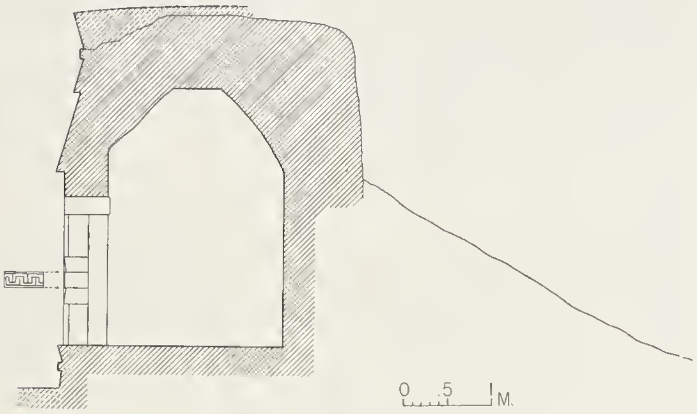


Figure 602. Kiuic, Group 2, Structure 1. Transverse section through north room of western range.

Doorways. Full-width jamb stones topped by corbels and stone lintels (fig. 603). Rectangular capitals on columns. Columns in center doorway crudely cut and somewhat flat sided rather than truly round. Columns in north and south rooms rectangular, made of three blocks each. Center block of each column cut in form of molding on front and sides but plain behind (figs. 601, 602). Fret or meander design carved on front of middle members of moldinglike blocks in columns of north room.

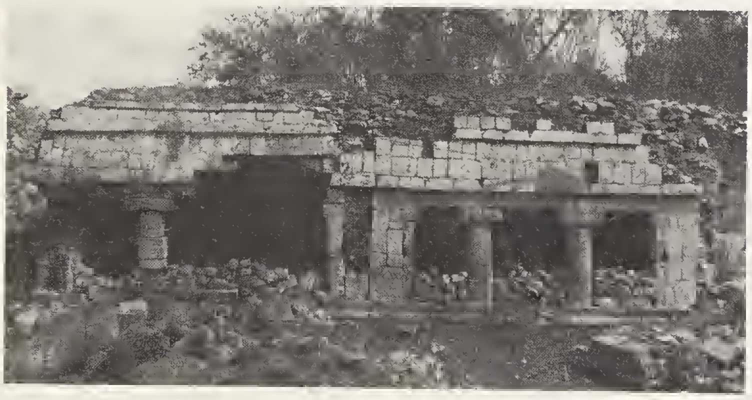


Figure 603. Kiuic, Group 2, Structure 1. West facade, looking east, and showing entrances to north and center rooms.

Vaults and Beams. Crude masonry. Wide in proportion to height (fig. 602). Vault of north room has no offset at level of spring and none under capstones. Spring of vault in north room one course lower on east side than on west. Vaults of center and south rooms have customary offset at level of spring but none under capstones.

Apparently no beams in any of these vaults.

Moldings. Battered upper facade topped by two-member molding that presumably once carried usual outward-leaning coping course (figs. 601–603).

Decoration. Beside carved column blocks (see above), a badly preserved painted capstone at center of vault of north room. Painting in fine-line technique (see Pollock 1970, p. 57), but very little left and subject obscure. Lines in black, red, and blue in spaces between lines. Traces of red paint on rear wall of center room.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

North room apparently built first, then middle room, south room last. This shown by joints in masonry between rooms (figs. 601, 603). Temporary outer faces of south end walls of north and center rooms of rough masonry, without facing stone, apparently in anticipation of further building (cf. Labna, South Group, Structures S1 and S2).

How the totally fallen eastern rooms were involved in this sequence is unknown.

Structure 2

A badly preserved pyramidal mound with three vaulted rooms at ground level on the western side. The pyramid appears to have been built against the back of these rooms, which were filled secondarily, supposedly at that time. The pyramid presumably supported a temple building now completely fallen. I did not ascertain on which side the stairway to the temple ascended.

The following brief notes deal with the rooms at the western base of the pyramid.

SUPERSTRUCTURE

Plan. See figure 592.

Construction. Doorway of two columns and rectangular capitals to each room. Battered upper facade zone surmounted by three-member cornice molding (fig. 604).

Decoration. Upper facade carries step-and-fret design and split columns in groups of three (fig. 604).

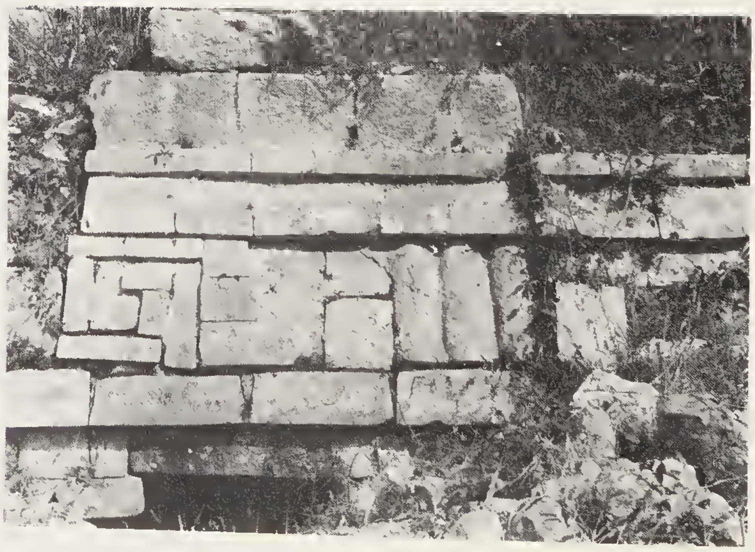


Figure 604. Kiuic, Group 2, Structure 2. Fragment of upper facade of western range of rooms, looking east, and showing decoration and cornice molding.

GROUP 3

Small group of three poorly preserved buildings. I have no notes on the substructural terracing and only cursory notes on the buildings. The only chultun observed at Kiuic lies just northeast of Structure 2 (fig. 592).

Structure 1

Badly fallen building notable mainly for decorated columns in one doorway.

SUPERSTRUCTURE

Plan. See figure 592.

Construction. North room has entrance with two rectangular columns and capitals. Columns partly buried in debris but enough visible to show carving on column block in each column and on each capital. Vaults carry offset at level of spring and beneath capstones. Semispecialized vault stone (fig. 605a).

Decoration. Each column of entrance to north room carries rather elaborate geometric decoration (fig. 605b). Chevrons on capitals point to left on north column, to right on south column. Sides of decorated column blocks carry same design as at front but without pendants, the squares being vacant. Debris stands to just below carving shown in figure 605b; not known if there was more decoration below.

Structure 2

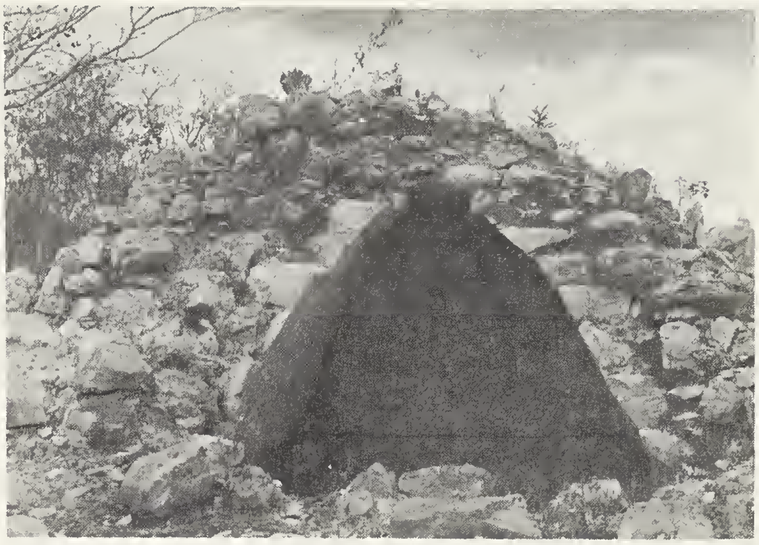
Small two-story building, the upper story completely fallen.

SUPERSTRUCTURE

Plan. See figure 592.

Construction. Stairway to second story seems to have been at east, although doorway to upper room at west. Main central doorway of two columns with rectangular capitals and corbels on jambs (fig. 606). Column shafts each a single stone. Full-width jamb stones and stone lintels. Simple rectangular medial molding and plain vertical upper wall zone at rear of building. No molding at front, but decoration immediately above lintels of columnar doorway strongly suggests rise in medial molding over doorway (cf. fig. 39).

Decoration. Fragment of simple geometric decoration of lines of triangles and diamonds over columnar doorway (fig. 606, and cf. fig. 414). Split columns in debris from second story.



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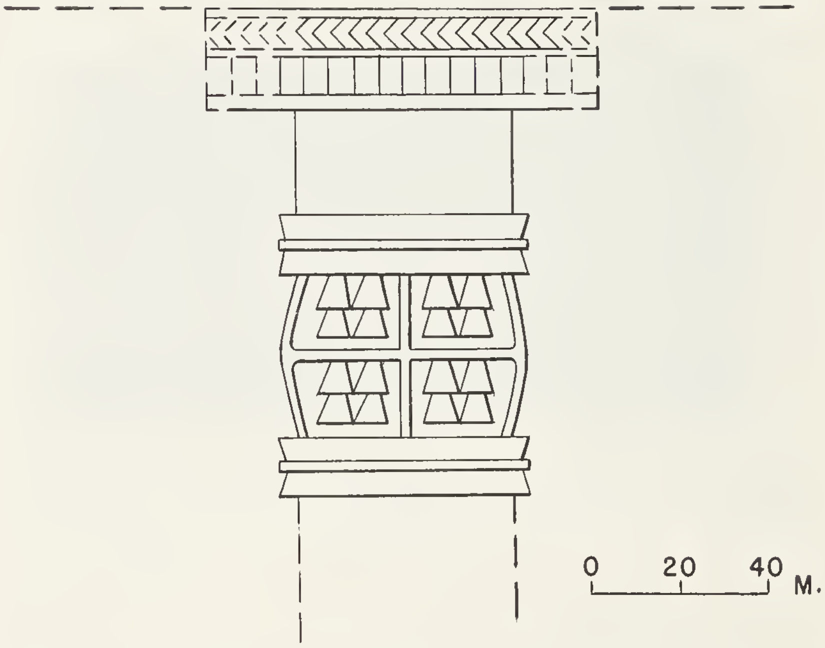


b

Figure 605. Kiuic, Group 3, Structure 1: a, partly standing vault; b, carving on north column in entrance to north room.

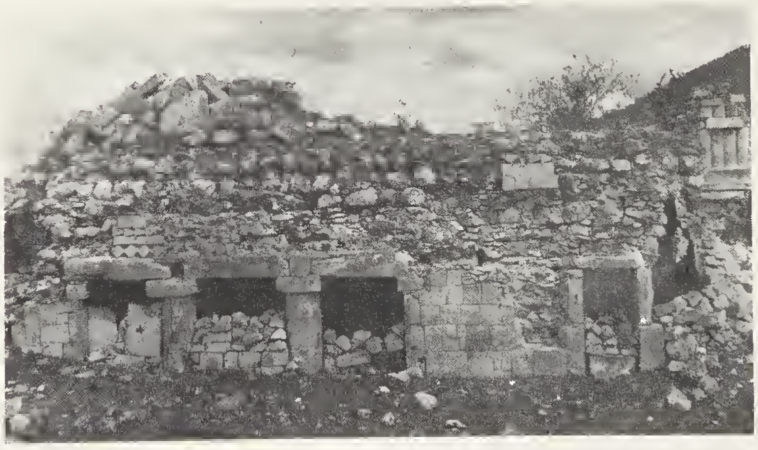


Figure 606. Kiuic, Group 3, Structure 2. Central and south entrances, looking east, and showing debris of upper story. West end of Structure 3 seen in background at right.

Structure 3

Poorly preserved building with a part of the north (rear) and west facades standing.

SUPERSTRUCTURE

Plan. See figure 592.

Construction. Fairly well-cut and fitted exterior wall stone (fig. 607). Three-member medial molding of standard design and four-member cornice molding of apron, colonnettes, rectangular string course, and presumably the usual outward-leaning coping course.

Decoration. Groups of three split columns separated by plain wall areas in upper facade zone (fig. 607).

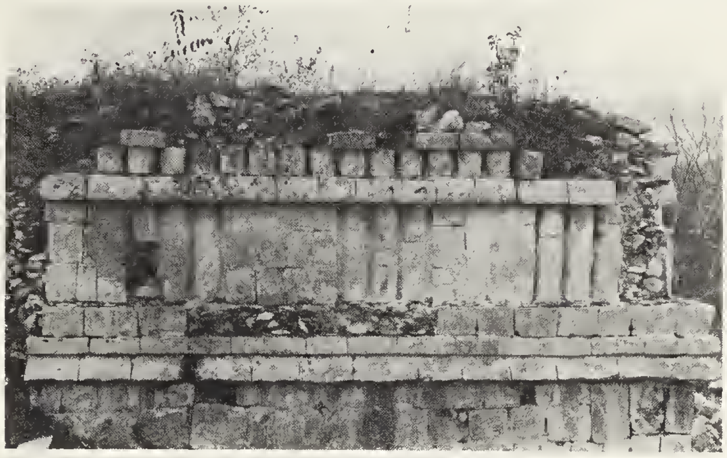


Figure 607. Kiuic, Group 3, Structure 3. Part of rear wall, looking south.

MONUMENTS

STELAE

Three stelae lying in court between Structures 2 and 3 of Group 2 (figs. 592, 608). Large depression in court, as though excavated, where monuments seem to have stood.

Stela 1. Carved (fig. 609a; and see Proskouriakoff 1950, fig. 90c). Maximum height 1.85 m, maximum width .71 m, maximum thickness .23 m. Badly weathered and broken in two parts. Rounded at top. Front, back, and sides of stela well dressed with edges sharp and well squared.

Skeleton in dancing posture. Carving apparently crude even allowing for weathering. Circular depression in place of head or face, and latter feature may have been of stucco. (See Proskouriakoff 1950, p. 163, for further comment.)

Stela 2. Plain. Maximum height 2.25 m, maximum width .62 m, maximum thickness .29 m. Stela rounded at top. Stone well dressed and shaped as in case of Stela 1.

Stela 3. Plain. Maximum height 3.10 m, maximum width .69 m, maximum thickness .35 m. Broken in two parts. Rounded at top. Well-dressed and shaped like Stelae 1 and 2.

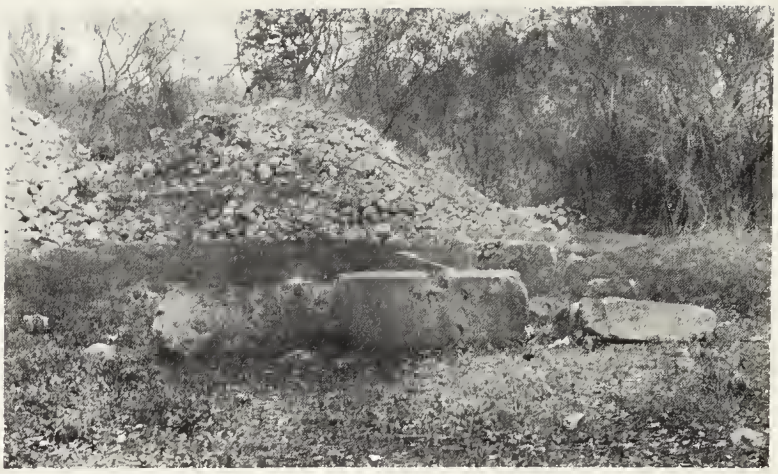


Figure 608. Kiuic, Group 2. Stelae in court between Structures 2 and 3, looking north.

ALTARS

Only two altars were observed at Kiuic, both in Group 1. The site is poorly explored, however, and there may well be more such monuments there. Both altars are plain and are of the column variety.

Altar 1. Plain (fig. 609b). Diameter at top .55 m, at bottom .39 m; height 1.22 m.

Lying on lower terrace and south of stairway to Structure 5, Group 1. Monument is approximately centered on Structure 5 and may have fallen from upper terrace.

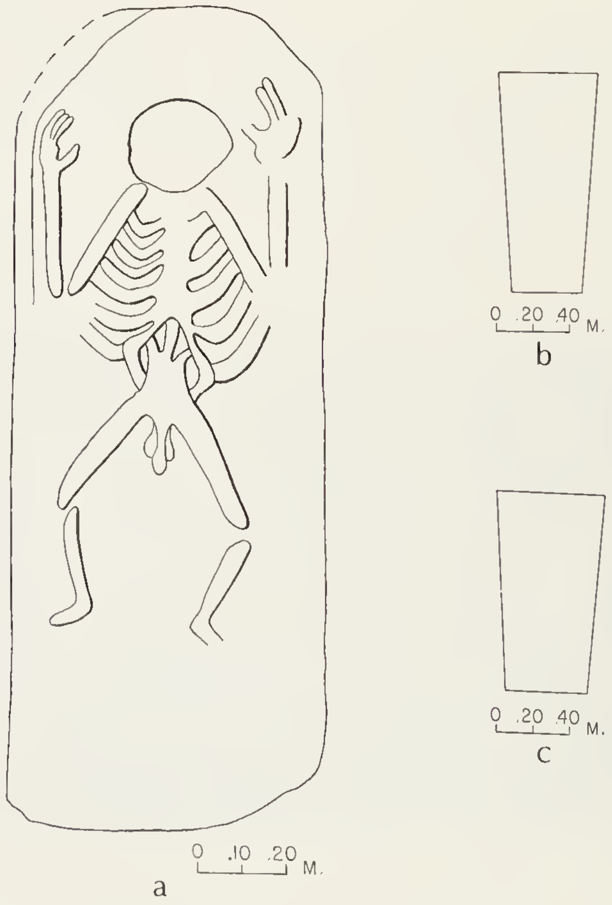


Figure 609. Kiuic. Monuments: a, Stela 1; b, Altar 1; c. Altar 2.

Typical column altar.

Altar 2. Plain (fig. 609c). Diameter at top .60 m, at bottom .45 m; height 1.10 m.

Resting on terrace before, and approximately centered on, second story of Structure 6, Group 1.

Typical column altar.

OTHER SITES

Dzula

(Tzula)

Approximately 10 km south of Xul and 30 km southwest of Tekax.

E.H. Thompson (1904, pp. 8–9) refers to the site as a group of ruins, the principal building of which was once an imposing structure of many chambers. His photograph of one room (ibid., pl. 1) shows typical Puuc construction in regard to both masonry and design of vault.

The ruins are known primarily for the remains of mural paintings. These were first described and copied by Thompson (ibid., pl. 2) and have been republished by Marquina (1928, p. 70) and Palacios (1945, p. 396). Toscano (1940, p. 48; 1944, p. 343; 1946, p. 571), who relates the frescoes to the Chichen Itza school of mural painting, interprets the scene as the making of offerings or tribute to a Maya cacique. It seems to me the scene might portray the assumption of office and investiture of some person of rank.

REFERENCE

E. H. Thompson 1904, pp. 8–9.

Itampte

Shown on Tulane University (1940, sect. 2) map 7 km southwest of Dzula and 6 km south by east of Kiuic (but see Kiuic, above).

I have no information on these ruins. Ricketson and Blom 1924–25) cite the Direccion de Antropologia de Mexico as the source of their knowledge of the site.

Chacmultun

ETYMOLOGY

Maler (1895, p. 249) gives *chacmultun* = red hill, and elaborates on the red color of the limestone of which the buildings are made. E. H. Thompson (1904, p. 10) translates the name as red-stone hills. Mariscal (1928, p. 18), quoting Martinez Hernandez, says *chac,* red; *mul,* artificial hill; *tun,* stone. Pijoan (1946, fig. 711) gives great red stone. Roys (1935, p. 3) originally translated Chacmultun red-stone mound, but later (personal communication) he observed that while *chac* usually means red, and the Motul Dictionary defines *multun* as stone mound (Martinez 1929, p. 643), *chac* can also mean great, notably in compounds (ibid., pp. 292–293). The red color of the building stone, however, favors the translation of *chac* as red.

SITUATION

Approximately 10 km south-southwest of Tekax and 15 km or more east of Xul.

TOPOGRAPHY

Generally hilly terrain. Major constructions located on hillsides and hilltops on each side of small valley (see Marquina 1951, pl. 225).

WATER SUPPLY

No known permanent natural water supply. Marquina map (see below) shows chultun in front of Courthouse approximately where Thompson plan has little square mound. Reygadas (1928, p. 183) mentions this particular cistern and there undoubtedly are others present. Modern artificial well at ranch of San Juan Bautista, San Anastasio, about 1 km northeast of ruins.

MAPS

E. H. Thompson (1904, pl. 3) plan copied by Marquina (1928, betw. pp. 68 and 69; 1951, pl. 225), Reygadas (1928, p. 182), and Palacios (1945, p. 406) with contour lines added.

SIZE

The three principal groups form an approximately equilateral triangle measuring about 200 m on a side. Moreover, most of the buildings shown on the maps are large, important structures. There are remains on the floor of the valley between the principal groups and there may be outlying structures, but those areas have not been explored.

CIVIC PLAN

The outstanding characteristic of Chacmultun, as known from the Thompson map (see above), is the utilization of natural eminences to locate the city's important civic and religious structures. The buildings tend to face one another, but, and perhaps more importantly, they focus on the floor of the valley that bisects the site. One is tempted to conjecture the presence of some important precinct or structure on the valley floor. In any event, lack of knowledge of this central part of the city is a handicap to understanding the overall plan.

Orientation. Thompson (1904) map shows three of the five major structures oriented to the cardinal points. The other two buildings face approximately 20° south of east. It is not clear whether north on the map is true north or magnetic north, but I suspect the latter. Magnetic declination in 1936 would have been about 6°45′ to 7° east, but I do not know what it would have been around 1900 when Thompson made his plan.

REFERENCES

Maler 1895, pp. 249–250.
Maler 1902, p. 199.
Mariscal 1928, pp. 15–21.
Marquina 1928, pp. 69–70.
Marquina 1951, pp. 739–745.
Palacios 1945, pp. 405–412.
Reygadas 1928, pp. 179–186.
Rickards 1910, pp. 61–63.
E. H. Thompson 1904, pp. 9–20.

CHACMULTUN

(North Group, Group 1)

Properly speaking, the name Chacmultun applies to this group of buildings in the northwest part of the ruins (see maps, above), but the name has been extended to include the whole site. The group rests on a relatively level mesa at a lower elevation than Groups 2 and 3. It faces south and southeast, overlooking the valley at the center of the ruins and looking toward the other major buildings. Although no stairway giving access to Group 1 was observed, and none is shown on the plan of the ruins, the principal approach seems to be from the southeast.

Group 1 is notable for its extensive terracing. At the south and east the lower terrace is faced with cut stone. Two small buildings, not shown on any map, are located at the southeast corner of the lower terrace. Battered, overhanging upper facade topped by what was probably three-member cornice molding on one building. Small, .20 m square, window at end of one room below level of spring of vault. Crude vault stones, well tailed in.

The E. H. Thompson (1904, pl. 3) plan shows a little square mound, probably the remains of a ceremonial platform or altar (fig. 612a), before Structure 2 and two dots, one to the east, the other southeast of this building, that might be taken to indicate either chultuns or monuments (altars). There is no mention in text of any of these features. The Marquina (1928, betw. pp. 68 and 69) map, copied by Reygadas (1928, p. 182) and Palacios (1945, p. 406), indicates a chultun approximately where Thompson shows the small square mound, and Reygadas mentions the existence of this cistern.

*Structure 1

(Chacmultun, Edifice 1 or A, Temple Palace, Palace, Palace of the Phalli)

SUPERSTRUCTURE

Plan. See E. H. Thompson 1904 (fig. 3); Mariscal 1928 (fig. 11); Marquina 1928 (pl. before p. 69); 1951 (pl. 225); Palacios 1945 (p. 407). I think the Thompson plan is most nearly correct.

Sections. See E. H. Thompson 1904 (fig. 4); Mariscal 1928 (fig. 14); Marquina 1928 (pl. before p. 69); 1951 (pl. 225); Palacios 1945, (p. 407).

Elevation. See Marquina 1928 (pl. before p. 69); Palacios 1945 (p. 407).

Base Moldings. Three varieties: plain, groups of colonnettes with plain zone between, three-member (fig. 610a). The last found west of south stairway.

Stairways. At south and west, both leading to roof of first story. West stairway not shown on any plan, but remains are plainly visible (E. H. Thompson 1904, pl. 4:2; and see Reygadas 1928, p. 181). Rose over vaulted passage. Both stairways secondary to first story.

Walls. Normal.

Doorways. Mostly simple rectangular openings with full-width jamb stones and stone lintels (E. H. Thompson 1904, pl. 4:1). Each column in doorways at south has rectangular capital and shaft made of single stone (ibid., pl. 4:3).

Wall Depressions and Projections. Cordholders of two-hole variety. Many projecting ring cordholders. Also those in form of human foot (see Marquina 1951, pl. 225). Room at north with three rings at each end below spring of vault, two rings halfway up one end of vault, foot-type cordholder in other end of vault.

Vaults and Beams. Inner room at west very wide (3.80 m). Sides of vaults tend to be flat rather than arched. Large specialized vault stones (fig. 610b, c).

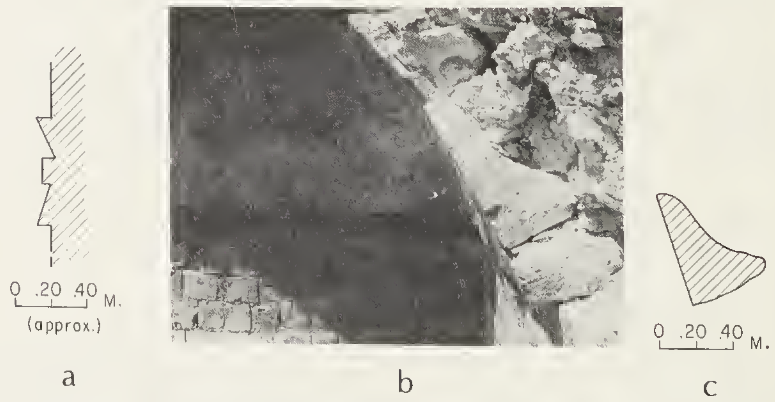


Figure 610. Chacmultun. Structure 1: a, sketch section of base molding west of south stairway; b, vault; c, section of typical vault stone.

Location of beams normal but in no great number. Some beam sockets in spring course of vault are square.

Moldings. Three-member medial molding with guilloche design on middle member (Mariscal 1928, fig. 14; Marquina 1928, pl. before p. 69). Cornice molding the same but lower member of two courses of stone, coping course higher than upper member of medial molding, and middle member carries numerous small projecting phalli (E. H. Thompson 1904, pl. 4:2,3).

Decoration. Banded split columns at corner of wall just west of south stairway (Mariscal 1928, fig. 14). May have been at other corners of structure. Banded split columns separated by niches simulating small houses or shrines in upper facades at south and west (E. H. Thompson 1904, pl. 4:2,3; Mariscal 1928, fig. 14; Marquina 1928, pl. before p. 69). Shrines simulate doorjambs, step up to inner chamber, vault, and feathers or thatch at crest of sloping roof.

Number of mask elements fallen at southwest corner. Seated human figure .50 m high (fig. 611) reputedly from same corner. Phalli in cornice molding already mentioned.

Second Story. Small ceremonial platform or altar on roof of first story. Second story presumably planned but never built.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Structure surely represents several periods or phases of construction (e.g., note base moldings and stairways), but these not worked out. Thompson (1904, p. 11) reports "chambers outlined but not built."

Structure 2

(Edifice 2 or B, Courthouse, Tlatocan)

SUPERSTRUCTURE

Plan. See E. H. Thompson 1904 (fig. 5); Mariscal 1928 (fig. 12); Marquina 1951 (pl. 225).

Section. See E. H. Thompson 1904 (fig. 5); Mariscal 1928 (fig. 13); Marquina 1951 (pl. 225).

Construction. Design of unusual recessed stairway (Mariscal 1928, fig. 13) that rises from plaza level to top of structure (fig. 612a) almost surely brought about by secondary addition of eastern rooms after main platform and stairway were built (fig. 612b). Sides of platform faced with dressed stone and plain but for opening to vault at west. Upper surface of loose boulders.

Three large steps lead from entrance level to floor of long-buried vault at west (fig. 613a). Vault crudely built without usual offsets at spring or beneath capstones.

Three-member medial molding of rooms at east has unusual projecting middle member of colonnettes (fig. 613b).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Rooms on each side of stairway at east seem quite surely to be secondary to main platform. Not clear whether platform was erected as a single operation or by successive efforts. Second story presumably planned but never built.

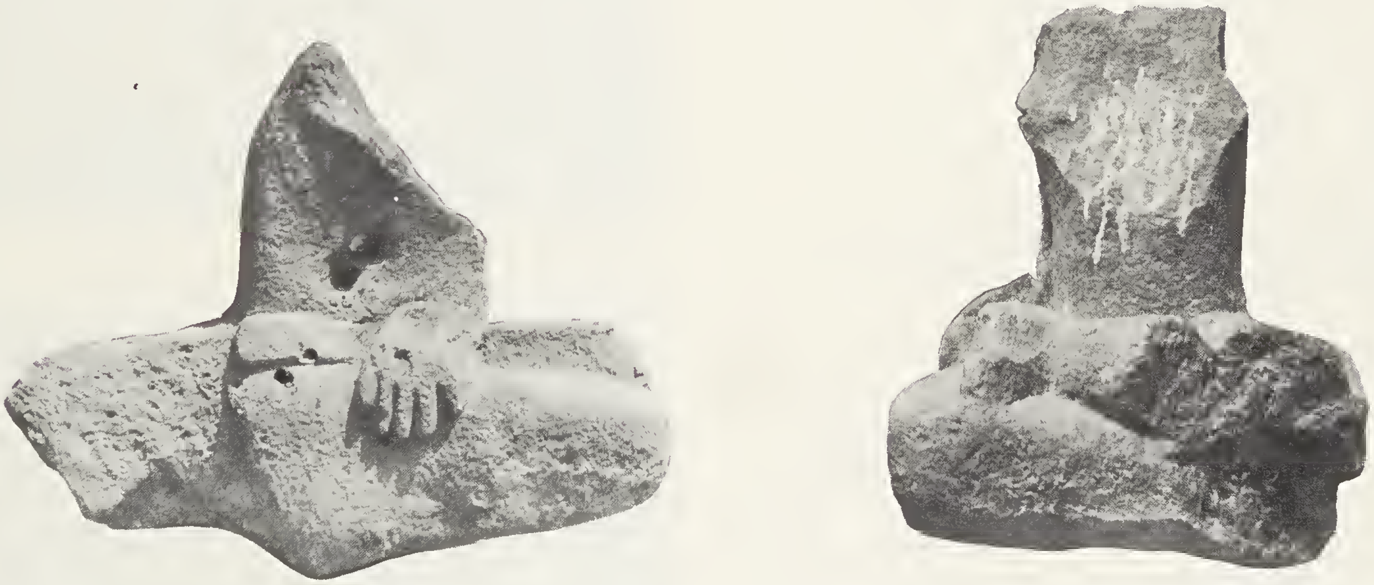


Figure 611. Chacmultun, Structure 1. Seated human figure reputedly from southwest corner of building.

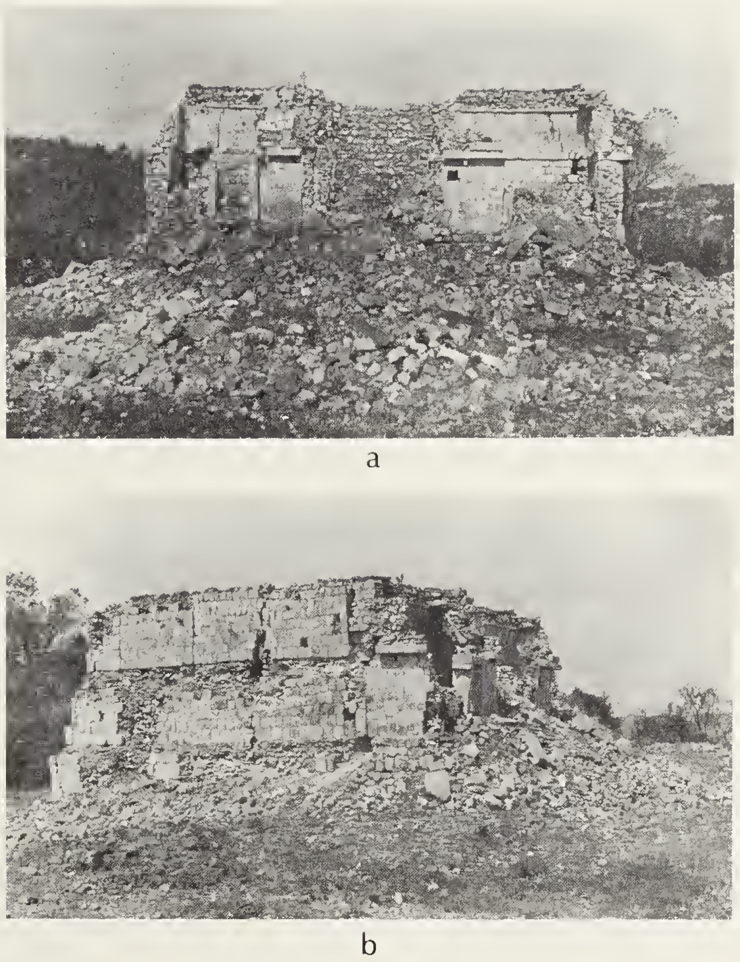


Figure 612. Chacmultun, Structure 2: a, east side, looking west, and showing debris of small platform in foreground, and central stairway flanked by partly standing vaults; b, south side, looking north, and showing joint between southeast room and main platform.

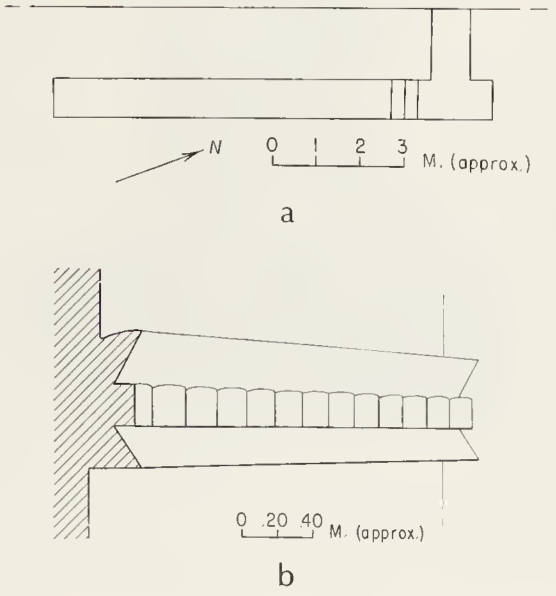


Figure 613. Chacmultun, Structure 2: a, sketch plan of burial vault; b, sketch of medial molding on eastern rooms.

Structure 3

(Edifice 3 or C, Building or Group of the Paintings)

SUPERSTRUCTURE

Plan. See E. H. Thompson 1904 (fig. 6); Marquina 1951 (pl. 226).

Section. See E. H. Thompson 1904 (fig. 7); Marquina 1951 (pl. 226).

Construction. Doorjambs made of three vertical courses of stone. Stone lintels. Niches about .30 m square in ends of some vaults and ring cordholder at spring level. Benches or altars (E. H. Thompson 1904, pl. 6:2) all seem to have had three little chambers or niches beneath them. Same large specialized vault stone seen in Structure 1. Middle member of three-member medial molding remaining on Rooms 8–11 carries guilloche design like that seen on Structure 1.

Decoration. Exterior decoration of building unknown other than medial molding. E. H. Thompson (1904, p. 15, and pl. 6:2) describes and illustrates small stone heads on supports of bench in Room 4.

Structure is notable for mural paintings in Room 10 described and copied by E. H. Thompson (1904, pp. 16–17, pl. 8) at turn of century (republished in Marquina 1928, pl. foll. p. 70, and Palacios 1945, pl. foll. p. 410). Thompson (1904, pp. 16–17) noted many traces of painting throughout the building.

Toscano (1940, p. 48; 1944, p. 343; 1946, p. 571) describes and interprets the scenes in Room 10. He relates the paintings to the Chichen Itza school, the same as at Dzula (see p. 363, above). Palacios (1945, p. 410) also describes these murals. Kubler (1962, p. 170) considers them to be of "a provincial and retardataire school of Late Classic date."

XETPOL OR XETH-POOL

(East Group, Group 2 or 3)

Maler (1895, p. 250) translates *Xetpol* as cloven (broken off) head, and says it refers to a figure that was formerly visible there. Mariscal (1928, p. 18), quoting Martinez Hernandez, gives *xeth,* broken; *pol,* head.

So far as is known, the group consists of a single structure that stands at the top of what E. H. Thompson (1904, p. 11) says is "one of the highest hills of the region." Facing west, the group or building looks across the small valley that separates it from Chacmultun, or North Group, on which it seems to be oriented (see maps, above). As the building rests on the brink of a steep slope falling away to the valley floor, there is no very natural or obvious approach, but one must assume it was from the west and up that steep hill.

Xetpol

(Xeth-Pool, Edifice 4, Temple Palace)

Except for Maler's (1895, p. 250) brief mention of upper stories that once had carried a roof comb, only the lowest range of rooms of this three-story building has received any attention in the literature.

SUPERSTRUCTURE

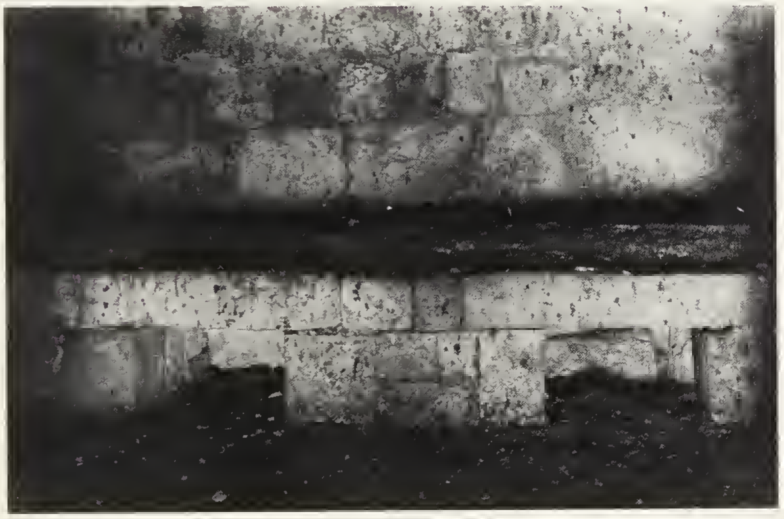
FIRST STORY

Plan. See E. H. Thompson 1904 (fig. 8); Marquina 1928 (pl. foll. p. 70); 1951 (pl. 226); Palacios 1945 (p. 412).

Section. See E. H. Thompson 1904 (fig. 9); Marquina 1951 (pl. 226).

Elevation. See Marquina 1928 (pl. foll. p. 70); Palacios 1945 (p. 412).

Construction. Plain base molding of simple course of dressed stone. Small stairways of four steps each to inner chambers (Rooms 5, 7, 9, 11; see Thompson 1904, fig. 8). Higher floor level of inner rooms probably due to rise of bedrock. Benches with little chambers or niches underneath in Rooms 12 and 13 (fig. 614a). Vaults with normal curve of soffits and large specialized vault stone. Three-member medial and cornice moldings, the lowest or apron member of each made of two courses of stone (see Maler 1895, fig. 4; E. H. Thompson 1904, pl. 7:1).



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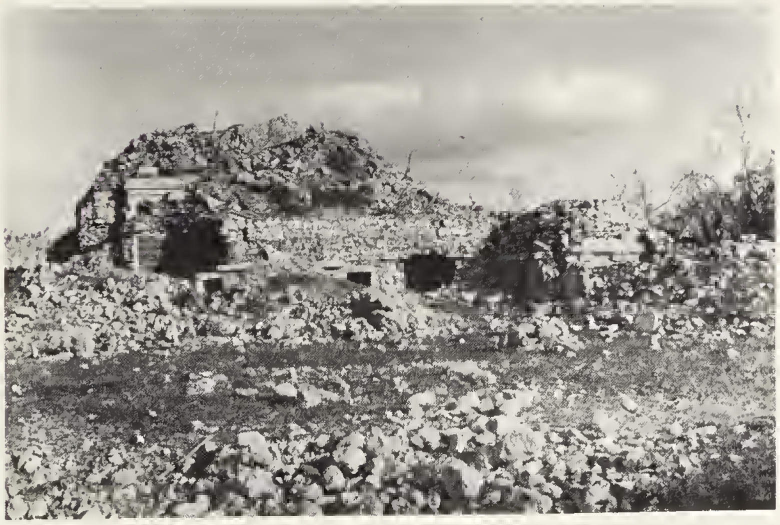


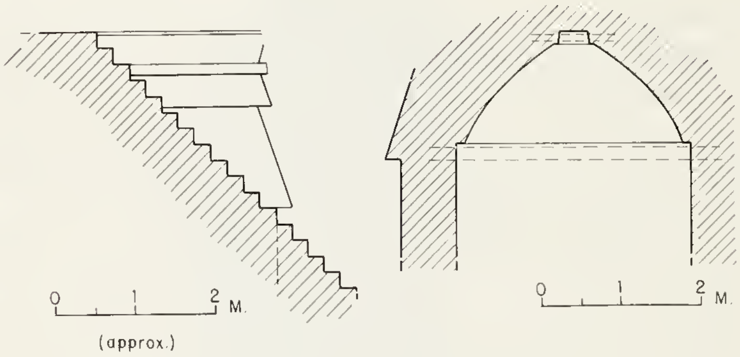
b

Figure 614. Chacmultun, Xetpol: a, niches beneath bench in Room 12; b, remains of second story, looking east.

Decoration. No exterior decoration. E. H. Thompson (1904, p. 18) reports traces of mural paintings in most of the rooms and describes and copies those in Room 8 at each side of the doorway to the inner chamber (ibid., pl. 9; also see Marquina 1951, pl. 226). I observed traces of cruder paintings in Room 12.

SECOND STORY

Construction. Stairway at north that is projecting at base but recessed at top crosses plane of wall at level of medial molding (fig. 615a). Probably another stairway at front (west) of second story (fig. 614b). Extraordinarily squat, highly curved vaults (fig. 615b). Vault stone normal. Two small beam sockets in small offset course beneath capstones, two beam sockets below spring in each vault. Plain battered upper facade rising from overhang at customary level of medial molding (fig. 615a). Upper facade vertical at side of recessed stairway. Cornice molding probably of three members, the lowest member built of two courses of stone.



a

b

Figure 615. Chacmultun, Xetpol, second story: a, sketch section of north stairway; b, transverse section of vault.

THIRD STORY

Completely fallen. Building rested on low platform, about 1.50 m high, with battered walls and typical three-member molding at upper edge. Maler (1895, p. 250) was told structure had supported a crowning wall with perforations, i.e., a perforated roof comb.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Room 3 an earlier construction than Room 2 (see E. H. Thompson 1904, fig. 8, and note double wall between Rooms 3 and 5). Rooms 14–16 have no debris inside them and may not have been completed (i.e., vaulted). Terrace behind these rooms lacks proper amount of fill and also looks incomplete. First story may have been built later than second story.

CABALPAK

(South Group, Group 2 or 3)

Mariscal (1928, p. 18), quoting Martinez Hernandez, gives *cabal,* low; *pak,* masonry construction. *Pak* may also be translated wall (see Roys 1935, p. 3).

As with Xetpol, or East Group, this southern group consists of a single multistory structure. It rests at the summit of a hill intermediate in height between those supporting the other two groups and faces north across the valley toward Structure 1 of the Chacmultun group (see Maps, above). The main approach to the group, or structure, seems surely to have been from the north.

Cabalpak

(Edifice 5)

SUPERSTRUCTURE

Plan. See E. H. Thompson 1904 (fig. 10); Marquina 1928 (pl. foll. p. 70); and 1951 (pl. 226); Palacios 1945 (p. 411).

Section. See E. H. Thompson 1904 (fig. 11); Marquina 1928 (pl. foll. p. 70); 1951 (pl. 226); Palacios 1945 (p. 411).

Construction. All but first story badly fallen. All ranges probably had simple base moldings of single course of dressed stone. Two steps to reach inner room at west end of first story, possibly because of rise in level of bedrock at that point. Vaults of first story flat sided and employ huge specialized vault stones up to .80 m high (see E. H. Thompson 1904, pl. 7:2). Vaults of other ranges apparently built of normal sized, semispecialized vault stone. First story carries five-member moldings and banded split columns on upper facade (fig. 616; and ibid., pl. 5:3).

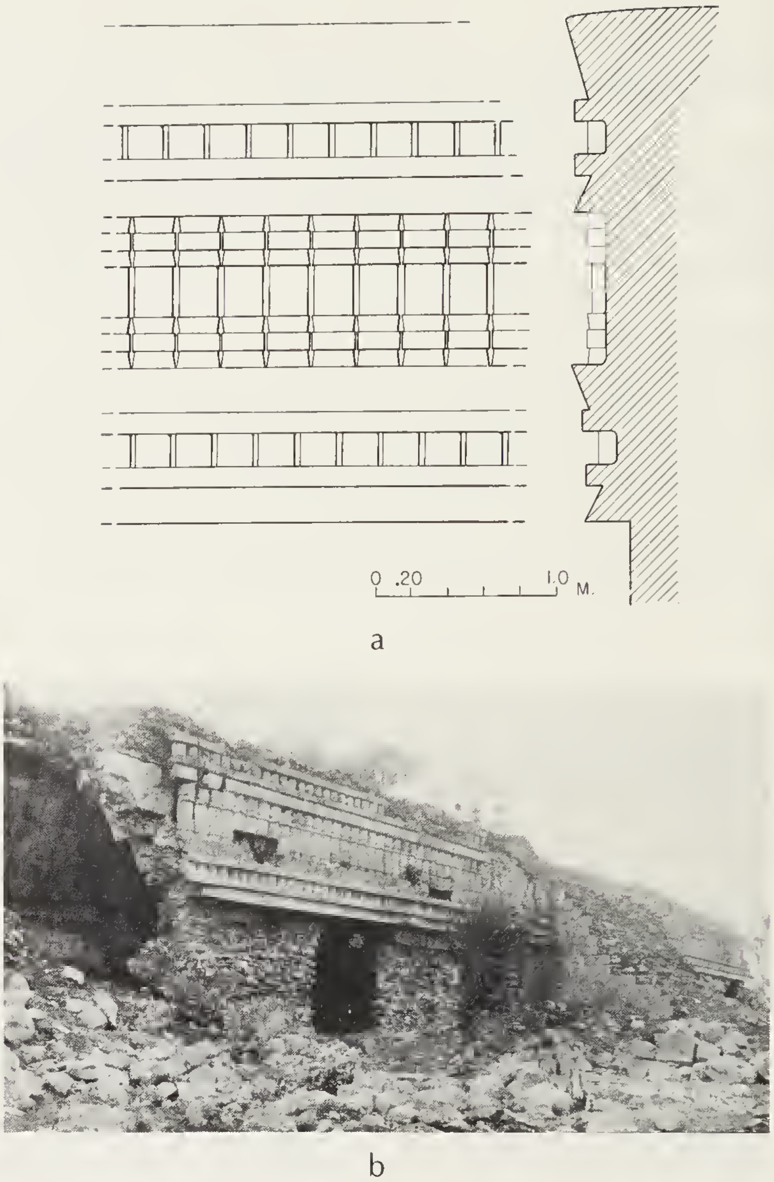


Figure 616. Chacmultun, Cabalpak, first story: a, elevation and section of upper facade; b, view of central rooms and stairway, looking southwest.

OTHER SITES

Nohcacab, near Tekax

(Nohcucab)

Four or 5 km northwest of Chacmultun and 9 or 10 km southwest of Tekax.

This site is shown on the Tulane University (1940, sect. 2) map as Nohcacab II. As there are at least four ruins that are, or have been, referred to by the name of Nohcacab, and the numbering to distinguish them has been confused in the literature, I am identifying the present site as near Tekax.

Stephens (1843, 2:89) mentions four buildings standing on the brow of a steep hill. The upper facades seem to have fallen, and he observed no decorative details. In one structure the soffit slopes of the vault rose to a point instead of terminating with the conventional capstones. Stephens (ibid., p. 84) saw in the church at Xul sixteen columns that reputedly came from the ruins of Nohcacab. He was told that the building from which they came was totally fallen (ibid., p. 90). It is unclear whether these were columns in the round or facade columns.

Zayas (1908, p. 44) illustrates a partly standing building that he labels as Nohcacab but makes no mention of the photograph in text. The site referred to seems most probably to be Nohcacab near Tekax but might be some ruin near Santa Elena (see p. 278, above) which was once called Nohcacab. The illustration shows a typical Puuc structure with the middle member of a three-member medial molding carrying the common zigzag and triangle design. The upper facade evidently was made of split columns, most of which had fallen at the time of the photograph.

REFERENCE

Stephens 1843, 2:84–90.

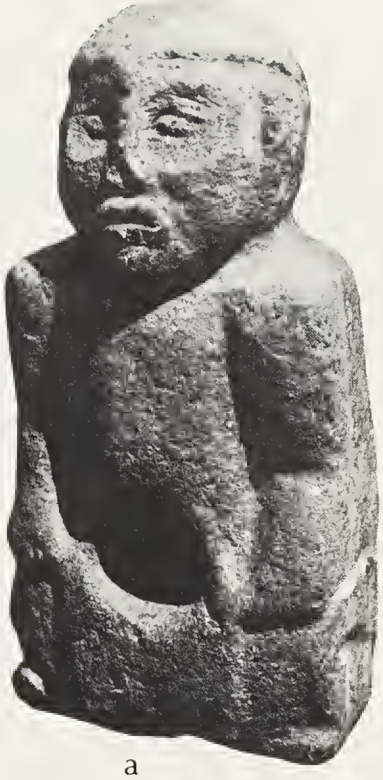
Tekax

Large town on railroad 34 km southeast of Ticul and slightly further west-northwest of Peto.

Although no ruins have been recorded here, Tekax is an old town, going back at least to the middle of the sixteenth century, and there is every chance that an aboriginal settlement was located there or close by (see Roys 1957, p. 74). In the Museum of Archaeology in Merida, Yucatan, are two stone sculptures, one labeled simply as coming from Tekax, the other as from "Municipio de Tekax." It is quite possible these pieces come from the ruins on the hacienda of Santa Maria (see below), where several other sculptures have been found, but in the absence of any further information it seems best to list them under Tekax, as follows:

M1. Seated human figure (fig. 617a). Museum description reads: "Monolith of primitive workmanship. Provenience: Tekax, Yucatan. The reason for the hole in the abdomen is unknown. Height .50 m, front to back .18 m, side to side (at the base) .25 m."

M2. Human head in serpent's mouth (fig. 617b). Museum description reads: "Head coming from Municipio of Tekax. Wearing zoomorphic helmet. Height .48 m, width .20 m, thickness .335 m."



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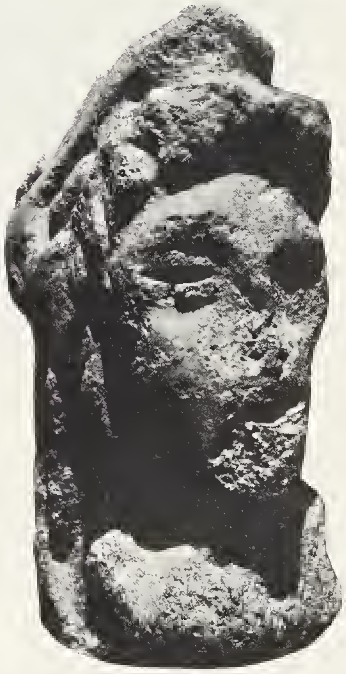


b

Figure 617. Tekax. Miscellaneous sculpture: a, M1, seated human figure; b, M2, human head in serpent's mouth.

Santa Maria, near Tekax

Three or 4 km southeast of Tekax. Stephens (1843, 2:243) observed, but did not visit, a high mound behind the hacienda buildings. The structure was reported by the local inhabitants to be entirely in ruins.

In the Museum of Archaeology in Merida, Yucatan, there are five stone sculptures labeled as coming from Santa Maria, Tekax:

M1. Human torso of stone (see E. W. Andrews 1943, fig. 19c). Head, arms, and legs broken off and missing. Museum description reads: "Human torso. Mutilated. Height .52 m, width .35 m at shoulders, thickness .23 m at pelvis. Hacienda Santa Maria, Tekax." Seems to have around the neck a serpent whose head is defaced. Shows the peculiarity of a hole and below this two protuberances that suggest some relation with phallic rites. This sculpture and similar pieces are discussed by Andrews (1943, pp. 82–87) who considers them to be non-Maya.

M2. Human face or mask (fig. 618a). Museum description reads: "Human head without attributes (mask). Height .20 m, width .23 m, thickness .20 m. Hacienda Santa Maria, Tekax."

M3. Human head in serpent's mouth (fig. 618b). Museum description reads: "Human head in the fauces of a serpent, nose and lips mutilated. Height approximately .36 m, width .20 m, thickness approximately .25 m. Hacienda Santa Maria, Tekax."

M4. Human skull with tenon behind (fig. 618c). Museum description reads: "Mask representing skull. Height .27 m, width .21 m, thickness to tenon .25 m. Hacienda Santa Maria, Tekax."

M5. Human head with animal headdress (fig. 618d). Museum description reads: "Head with zoomorphic helmet. Possibly deer. Provenience Hacienda Santa Maria, Tekax. Height .325 m, width .16 m, thickness .35 m."

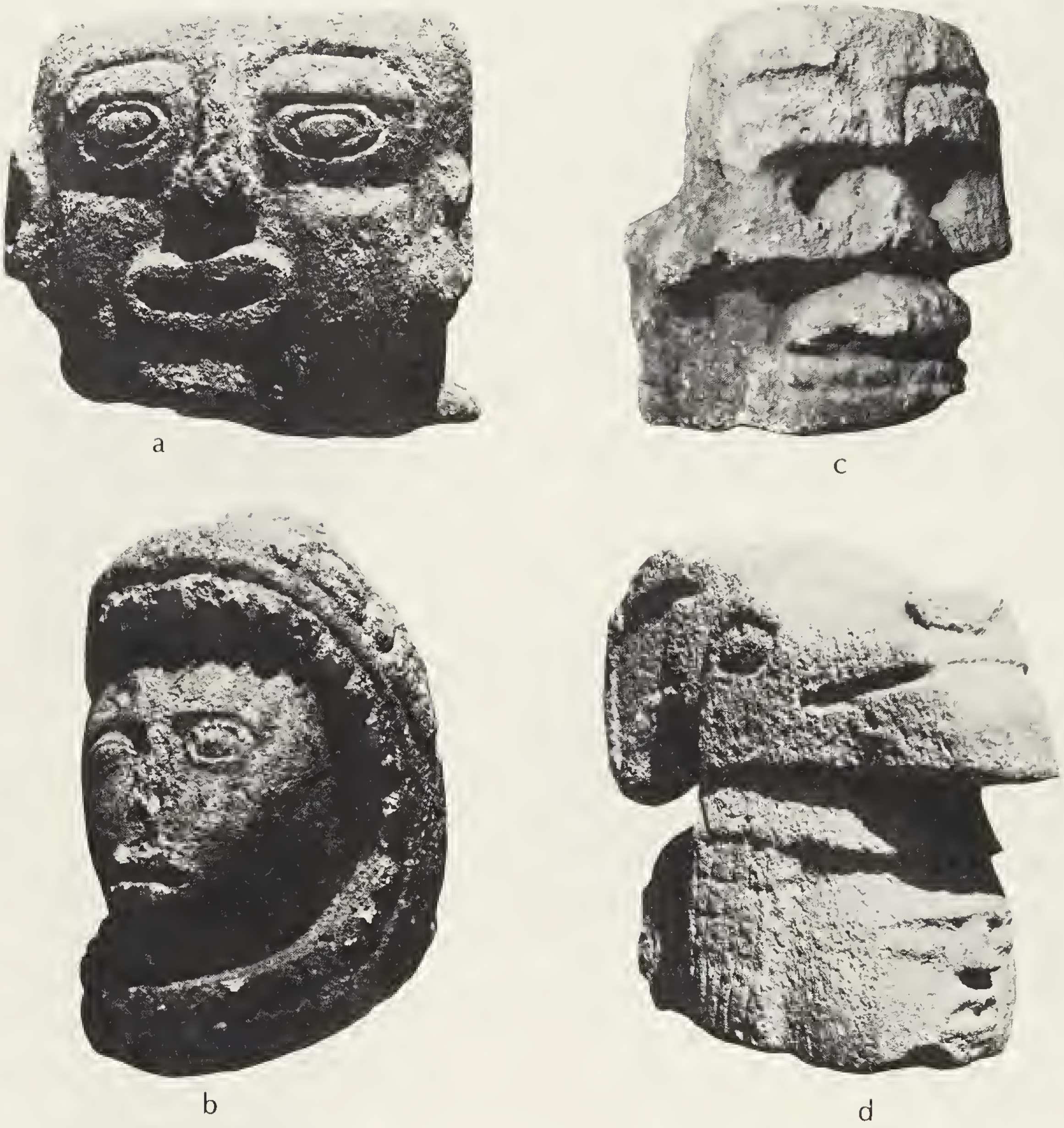


Figure 618. Santa Maria. Miscellaneous sculpture: a, M2, human face or mask; b, M3, human head in serpent's mouth; c, M4, human skull; d, M5, human head with animal headdress.

Ticum
(Ticun)

Nine km southeast of Tekax. Stephens (1843, 2:240) was told of these ruins but did not visit them. The ancient structures were reported to be entirely in ruins, the church, convent, and houses of the town having been built from them.

Chuncanob
(Chunkanab, Chuncanab) or Saccacal

Approximately 10 km southeast of Tekax and 2 or 3 km south of Tinum. Under the names of both Chuncanob and Saccacal (see below) this site seems to be incorrectly located on the Tulane University (1940, sect. 2) map.

Fair-sized site occupying an area some 200 by 300 m, on an irregular plateau in hilly terrain. Sketch map and description by Carter (1935) indicate extensive terracing and eight structures, mostly in poor state of preservation, of which two are clasified as palaces, four as pyramids, one as a terrace, and one simply as a mound. Only Palace A offers any amount of architectural detail. This complicated two-story structure, apparently built in several stages, is unusual in that one part of the building carries a widely rounded external corner. Otherwise, the structure is of conventional Puuc style with two-member medial molding, battered upper facade, and split column and mask decoration (ibid., figs. 3–6). The mask is also described by Hissink (1934, p. 26).

Carter (1935, pp. 53–58) mentions many split columns in the fallen debris of Pyramid B and roughly describes the badly fallen Palace G.

Elsewhere (Pollock 1936a, p. 121) I have expressed the opinion that Chuncanob is the same site as that called Saccacal or Zaccacal by Stephens (1843, 2:235–237). I based this opinion on his description of buildings that I take to be Carter's Pyramid B and Palace A. Since then I have acquired, thanks to the late R. L. Roys, the copy of a detailed map that shows Sacacal Hacienda to lie only a kilometer or two south of Ticum. As Stephens (ibid.) says, the ruins are about 1 km from the hacienda in the direction of Tekax, this places them almost exactly where Carter (1935, p. 38) locates Chuncanob and virtually assures the identity of that site and Saccacal.

Stephens (1843, 2:235–237) adds to Carter's description of the ruins in noting that one building (Carter's Pyramid B) had a painted capstone at the center of the vault. He also observed on a lower terrace a large underground chamber that might have been the remains of a chultun or a burial vault.

REFERENCE

Carter 1935.

Saccacal

(Zaccacal, Sacacal, Sac-akal)

See Chuncanob, above.

Sulpacal

(Sutpacal)

This site is shown on the Tulane University (1940, sect. 2) map about 15 km south of Tekax. It is also shown on the Spinden (1913) and Marquina et al. (1939, Yucatan) maps of ruins, and on many topographic maps.

I know of no reference to these ruins in the literature. It is just possible there is a confusion with the Stephens site of Saccacal (see above).

Xkichmook

My stay at Xkichmook was only an hour and a half and my notes are extremely brief, dealing almost entirely with Edifice 1, or the Palace. The text that follows should be used in conjunction with E. H. Thompson's (1898) description of the ruins, the most extensive treatment of the site that has so far appeared.

In 1942 the late E. W. Andrews spent a week or ten days at Xkichmook making plans, sections, elevations, and detailed architectural drawings of the buildings, as well as obtaining a good photographic record of the architecture. When this material is published, it will undoubtedly constitute the most thorough study of the ruins yet to appear.

ETYMOLOGY

E. H. Thompson (1898, p. 213) says *Xkichmook* signifies the buried beauty, and goes on to say he thinks the name *Xkichmul,* a word formed from *ichil* (between) and *mul* (hill), was intended. R. L. Roys (personal communication) says that beauty would be *cich,* not *kich.* He believes the actual name of the site is *Ch'ich' - muc* (bird - *muc*), a name he gets from the Berendt MS.,"Nombres geograficas en lengua Maya." Roys thinks Standley's (1930, p. 242) *zitz - muc, Celtis iguanaea* (Jacq.) Sarg., may really be *ch'ich' - muc.* Hissink (1934, p. 62), presumably following Maler, prefers the name Xkichmol, which is explained as the abbreviation of the name of the plant *Chacchikichmol.* Variant spelling and other names: Xkichmul, Xkichmu, Kichmu, Xkichmol, Xchmool, Kichmool, Xkichmoh, Ch'ich'-muc, Chichmuc.

SITUATION

Tulane University (1940, sect. 2) map shows Xkichmul 24–25 km south of Xul and about 38 km north-northeast of Iturbide. I suspect the location of the ruins should be 5 or 10 km farther west, near the Yucatan-Campeche border.

TOPOGRAPHY

E. H. Thompson (1898, pp. 213–214) describes the ruins as lying in a narrow valley between rocky hills. He refers to the hillsides as precipitous, and the valley bed, which trends southeast, as generally level, of bedrock covered in places with a deep layer of kancab (red earth). I have no notes on topography but my memory is of a less rugged country than the sharply hilly terrain further north.

WATER SUPPLY

There is a good-sized aguada about 1 km east of the site. This pond contained water the end of March when I was there, but I doubt if the supply is permanent. Thompson (1898, pp. 225–226) found numerous chultuns in the ruins.

MAP

Thompson's (1898, pl. 26) plan of the Palace Group is only published map.

SIZE

There is no scale on the Thompson (ibid.) map. Certain measurements given in text, when applied to the plan, suggest a scale of about 20 feet to the inch or 1:240. When this scale is applied to other features, however, it seems clearly incorrect—about twice as large as might be expected. If one accepts the first scale, the map covers an area about 100 m square; the second scale gives an area of about 200 m square.

Thompson (1898, p. 214) describes large and elaborate terracing north of the group, some 187 feet (57 m) in extent, and an outlying group of three buildings 520 feet (158.5 m) west of the Palace. With the exception of Edifice 1, the structures at Xkichmook do not seem to be of major importance, and I should guess the site to be small to medium in size.

CIVIC PLAN

We know nothing of the plan of the site as a whole. Judging from the Thompson (1898, pl. 26) map, the Palace Group shows a relatively orderly plan of adjacent and connecting courts around Edifice 1 but a somewhat dispersed arrangement of the other structures, with the possible exception of the terrace and court of Edifices 5 and 6.

I strongly suspect that many of the terraces shown by Thompson (ibid.) without superstructures once supported dwellings or other domestic structures of perishable materials. The presence of reservoirs, or chultuns, makes this particularly likely.

Orientation. Thompson (ibid.) shows most of the major buildings oriented to the cardinal points, only Rooms 16–18 of Edifice 1 and Edifice 2 diverging significantly from that orientation. I do not know if the map is oriented to true north or to magnetic north.

REFERENCE

E. H. Thompson 1898.

Edifice 1

(Palace, Temple Palace)

Following E. H. Thompson (1898, pp. 215–218), I treat Edifice 1 as a single structure, although it might well be considered to be an assemblage of several buildings. My brief notes deal only with this structure.

PLAN AND SECTIONS

See Thompson 1898 (pl. 26, and pl. 27A–B, C–D).

SUBSTRUCTURE

Thompson (1898, p. 214) describes elaborate terracing, partly natural, partly artificial, that forms the northern approach to, and underlies, Edifice 1 and surrounding structures.

SUPERSTRUCTURE

CENTER WING (Rooms 6–11)

Plan. See E. H. Thompson 1898 (pl. 26).

Section. See Thompson 1898 (pl. 27A, B).

Base Molding. Lower story has two-member molding. Rather high lower member of groups of three colonnettes separated by plain areas. Two courses of stone used in plain areas. Upper member a simple rectangular string course.

Second-story base molding of three members (fig. 619). Same as that on first story, but addition of lowest member.

Walls. Typical Puuc masonry. Medial wall in lower story .90 m thick. Walls of upper story very high (ca. 3.50 m) to spring of vault.

Doorways. Typical Puuc jambs and lintels in doorways of first story. Jambs in second story built of small stone, but much larger than wall stone. Look like specialized jamb stones in profile. Two vertical courses to each jamb.

Wall Openings. Small windows approx. .15 m square at half height of walls in upper story.

Wall Depressions. Usual Puuc cordholders and rod sockets in first story rooms. Niches approx. .25 m square at half height of walls in second-story rooms.

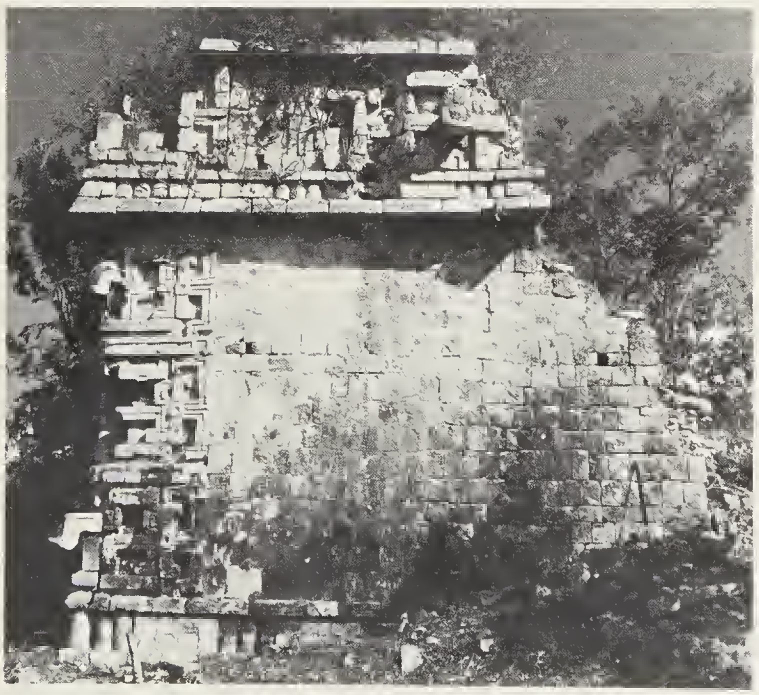


Figure 619. Xkichmook, Edifice 1, Center Wing. West facade of second story at northwest corner, looking east.

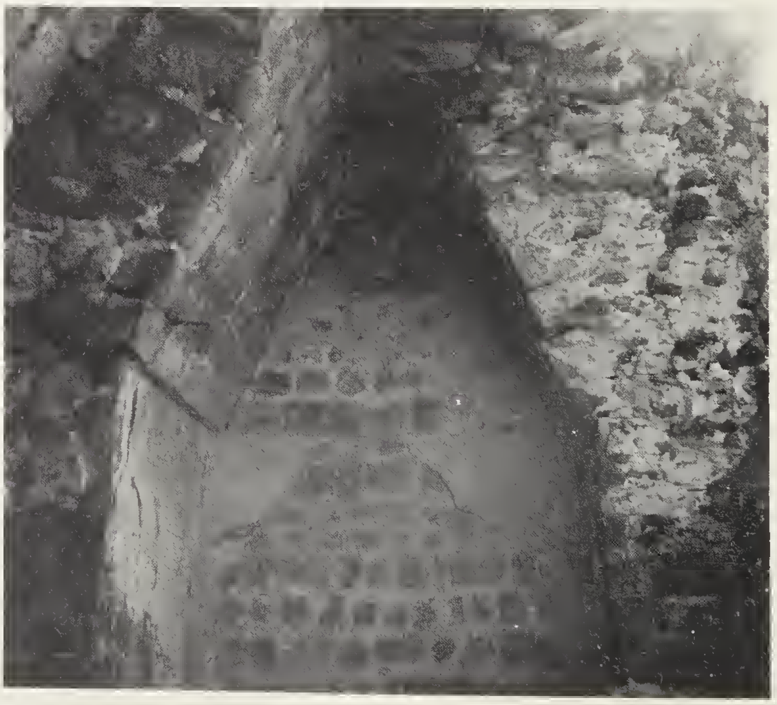


Figure 620. Xkichmook, Edifice 1, Center Wing. East end of Room 7, looking east, and showing vault in section.

Vaults and Beams. Standard Puuc vaulting of stone of semispecialized type (fig. 620) but beams in second course below spring in lower story rooms.

Moldings. Two-member medial molding of rectangular upper member and lower apron member built of two courses (fig. 621). Groups of three colonnettes separated by plain areas in upper course of apron member. Cornice molding same as medial but presumably with usual outward-leaning coping course.

Decoration. Pairs of split columns on lower and upper facade zones (fig. 621). Elaborate serpent-mask decoration at each side of stairway and on upper facades (see Hissink 1934, pp. 62–66; Marquina 1951, photo 346). Masks at corners and on frieze of upper story (fig. 619). Graffiti on walls of rooms and paintings on walls and capstone (see E. H. Thompson 1898, pp. 226–227).

Secondary Construction and Building Sequence. Thompson (1898, p. 216) reports the central substructural platform that supported Rooms 8, 9 was built prior to the wings holding Rooms 6, 7 and 10, 11. He also believes that an earlier structure rested where the upper temple (Rooms 8, 9) now is.

WEST WING (Rooms 1–5)

Plan. See E. H. Thompson 1898 (pl. 26).

Section. See Thompson 1898 (pl. 27 C, D).

Elevation. See Pijoan 1946 (fig. 719).

Construction. Benches (Thompson 1898, p. 216) with rectangular molding at upper edge, central niche in front, and colonnettes (fig. 622a).

Decoration. Three-quarter corner facade column made of wall stone and with round base and capital (fig. 622b). Facade at center of wing (Rooms 2, 3) projects beyond line of lateral rooms (Rooms 1 and 4). For mask decoration, see Rickards 1910 (p. 60, top, mislabeled Kewich; p. 66, middle); Case 1911 (p. 106); Hissink 1934 (pp. 64–65).

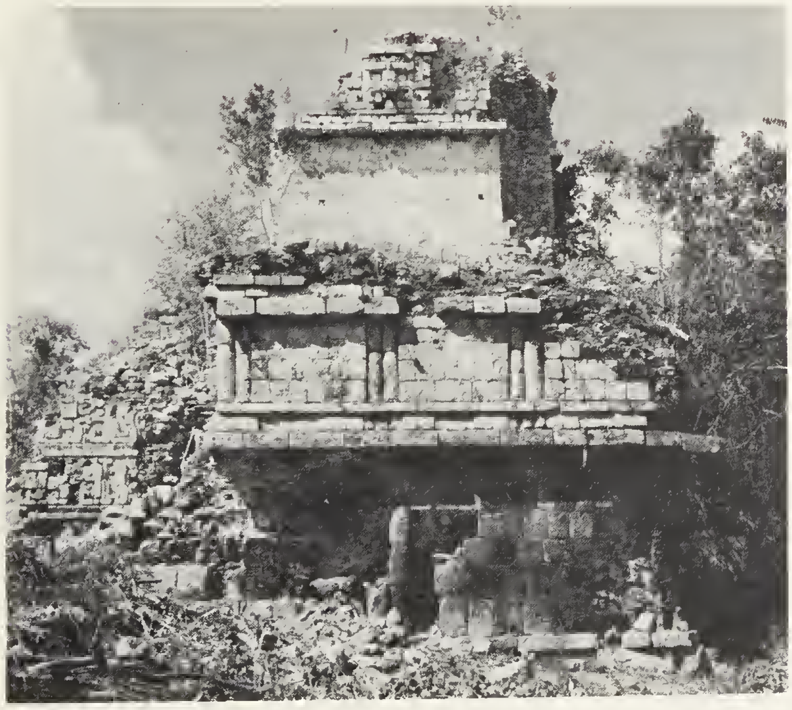


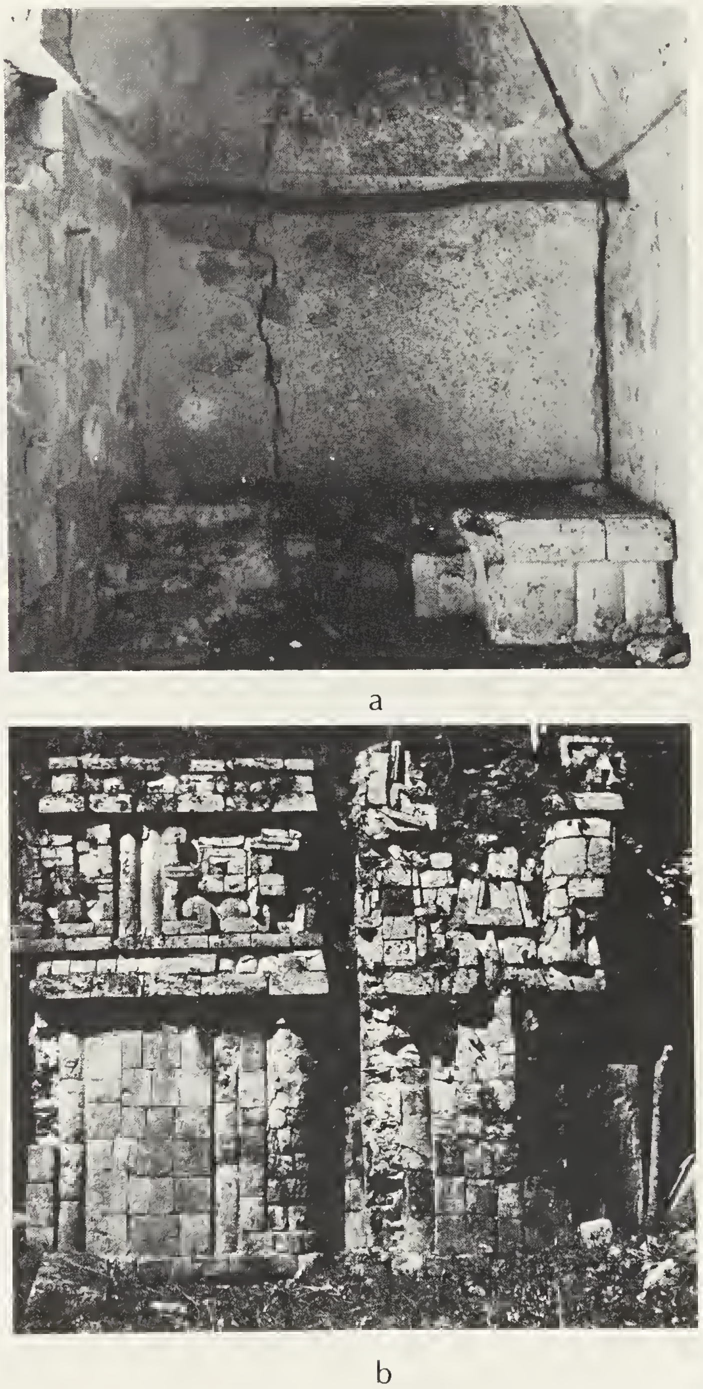
Figure 621. Xkichmook, Edifice 1, Center Wing. East facade, looking west, and showing second-story tower.

EAST WING (Rooms 14–18)

Plan. See E. H. Thompson 1898 (pl. 26).

Construction. Cordholder made of thin rectangular stone with round hole through it tenoned into wall. Three-member medial molding with top member like usual coping course of cornice molding (fig. 623).

Decoration. See Thompson 1898 (pp. 215–216); Marquina 1951 (photo 344).



a

b

Figure 622. Xkichmook, Edifice 1, West Wing: a, south end of Room 4, looking south, and showing remains of bench; b, east facade at juncture of Rooms 1 and 2, looking west.

Remarks. Large amount of mask material, both in place and fallen. Masks seem to make use of more stones for each element than in typical Puuc construction and must have depended on a great deal of plaster or stucco for final effect.

Edifices 2–7

I have no notes on these buildings.

PLANS AND SECTIONS

See E. H. Thompson 1898 (pls. 26, 27, figs. 25–27).

CONSTRUCTION

See Thompson 1898 (pp. 218–224, pls. 15–20).

DECORATION

See Thompson 1898 (pls. 18, 19); Rickards 1910 (p. 62, top, mislabeled Chacmultun); Hissink 1934 (pp. 66–67).

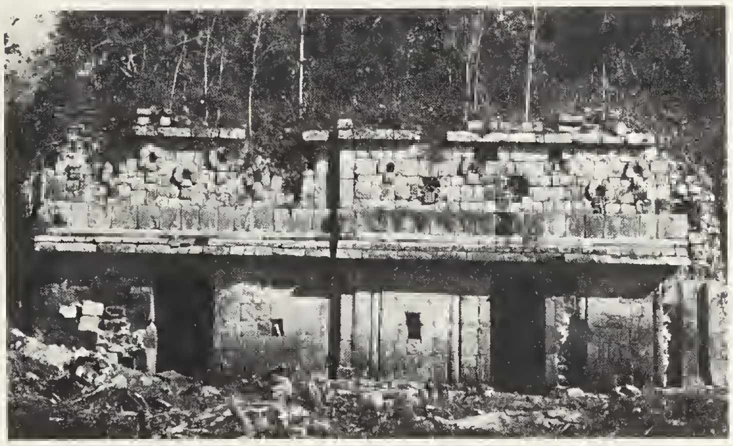


Figure 623. Xkichmook, Edifice 1, East Wing. West facade of Rooms 14 and 15, looking east.

MONUMENTS

E. H. Thompson (1898, p. 217) mentions a number of low circular platforms that are often in front of the principal stairways of structures (ibid., pls. 26, 27C, D). He says, "Most of them have in the center a cylindrical stone; some of these appear to have been stellae or phalli, and others mere pedestals." There is little doubt, I think, that he is referring to the common column and drum altars of the Puuc area (cf. Labna, Strs. 5 and 12). He shows three such stones centered on circular platforms on his map (ibid., pl. 26) but implies there were actually more.

OTHER SITES

Tampak

Marquina et al. (1939, p. 286) place this ruin 14 km southwest of Xkichmook and cite an unpublished manuscript as their source. Tulane University (1940, sect. 2) map shows Xkichmook considerably farther west than the map in Marquina et al. (1939, Yucatan) which leaves Tampak southeast of the former site. If Xkichmook is more nearly correctly placed on the Tulane map, and I suspect it may lie even farther west, and if Tampak is 14 km southwest of Xkichmook, the site should be in Campeche, not far from the well-known ruins of Santa Rosa Xtampak. In other words, Tampak and Xtampak, which are the same word (see Pollock 1970, p. 46), may refer to the same site rather than separate sites. Santa Rosa Xtampak is a Chenes ruin and is outside the Puuc area. I have no information on Tampak other than that given by Marquina et al. (1939, p. 286).

Chunmu

(Chun-mul)

About 4 or 5 km south of Becanchen. The ruins are described as consisting of a hill (i.e., artificial mound) 60 feet (18.3 m) high, with other small hills and mounds in the environs.

REFERENCE

Anon. 1845b, pp. 275–276.

Becanchen

(Bechanen)

Village some 30 km south and a little east of Tekax and approximately 40 km southwest of Peto.

Stephens (1843, 2:230) mentions sculptured stones from ancient buildings in the wall of a house and was told the foundation of every house on the plaza of the village employed material from the same source. He apparently did not see any ancient buildings still standing, but observed a number of shallow wells that he believed to be of aboriginal manufacture (ibid., pp. 230–232).

In the Museum of Archaeology in Merida, Yucatan, there are two large stone sculptures labeled as coming from Becanchen, Tekax. Stevenson (1928), presumably quoting the director of the museum at the time of writing, says the figures were found standing alone at the foot of a hill.

M1. Simian figure of stone (see Montandon 1931, pl. 2b–d, f) 1.40 m high, .90 m wide across shoulders, head .40 m high.

Pot-bellied figure with one arm and both legs broken off. Small figure held in left arm. Tenon at back to help support figure. Early museum description read: "Monstrous bisexual figure with a child in the left arm. Provenience: Becanchen, Municipio of Tekax." Later museum description reads: "Monolithic figure of primate, probably Ateles; feminine sex well represented by the hypertrophy characteristic of the genus Ateles. One arm and lower extremities broken off. A small figure, probably its infant, on the left arm. Figure broken and reconstructed, badly deteriorated. Height 1.39 m, width at height of abdomen .98 m, total thickness .60 m. The height is taken from the base in which it is embedded."

For further description, see Stevenson 1928 and Montandon 1931.

M2. Simian figure of stone (see Montandon 1931, pl. 2a, c, e) 1.45 m high, 1.10 m wide across shoulders, head .50 m high.

Great pot-bellied figure. Arms broken off short distance beyond armpits. Legs broken and restored to just below crotch. Question whether figure is male or female. Early museum description read: "Monstrous figure similar to the preceding [i.e., M1 above]. Provenience: Becanchen, Municipio of Tekax." Later museum description reads: "Monolithic figure of primate, probably Ateles. Extremities broken. Partly reconstructed. Height 1.48 m, width at pelvis .88 m, width at arms 1.15 m, approximate total thickness .60 m. Becanchen, Tekax."

For further description, see Stevenson 1928 and Montandon 1931.

San Pablo, near Becanchen

I am not sure of the precise location of this site in relation to Becanchen, but I believe it to be a few kilometers north of the village.

As described by Folan (1969), San Pablo seems to be a relatively small site of eight badly fallen structures covering an area less than 0.5 km in length. Structure 1, the largest and best preserved building, is reported (ibid., p. 57) to be of veneer masonry of Florescent-period type. Sculptured facade ornaments and a column drum were observed in the fallen debris. Partial excavation of Structure 2 uncovered a three-member base molding with groups of three columns separated by plain areas in the middle member and a rectangular top member that is plain at places and carved with twisted-rope and pleat decoration at other places (ibid., pls. 2–4). There also was revealed what I take to be a three-quarter column built of wall stone (cf. Xkichmook, Edifice 1, West Wing, above) at one corner of the building (ibid., pl. 4, and p. 62), and a stone lintel (ibid., pl. 2). The building is reported to be of "Puuc-Chenes style" (ibid., p. 61). Structure 3, also partially excavated, is said to be of "Mayapan period" (ibid., p. 62, and pl. 5).

A large phallic sculpture (ibid., pl. 6, and p. 67) was observed lying on the ground near Structure 7.

REFERENCE

Folan 1969.

Calotmul, near Tzucacab

Approximately 8 km south of Tzucacab, a village on the railroad 16 km west of Peto.

Calotmul marks the site of a pre-Conquest town in an outlying district of the ancient province of Mani, or Tutul Xiu (Roys 1957, p. 77). Although the site is better known as a very early Spanish settlement than as an aboriginal ruin, Roys (1952, pp. 163–164) observed a number of ancient platforms and large mounds, one of which is perhaps 18 m high. Remains of a vaulted building were noted.

Kakalna

I assume this site is near the settlement of the same name, 3 or 4 km south-southeast of Tzucacab, Peto.

The only reference I have to the ruins is a drawing (fig. 588) by Teobert Maler, a copy of which is in the Museum of Archaeology in Merida, Yucatan. The drawing is of a crude sculpture of a face that seems to me of questionable pre-Columbian date. Beneath the drawing is written, in Spanish: Stone found in the ruins of Kakalna. Kakalna = house of fire, public house.

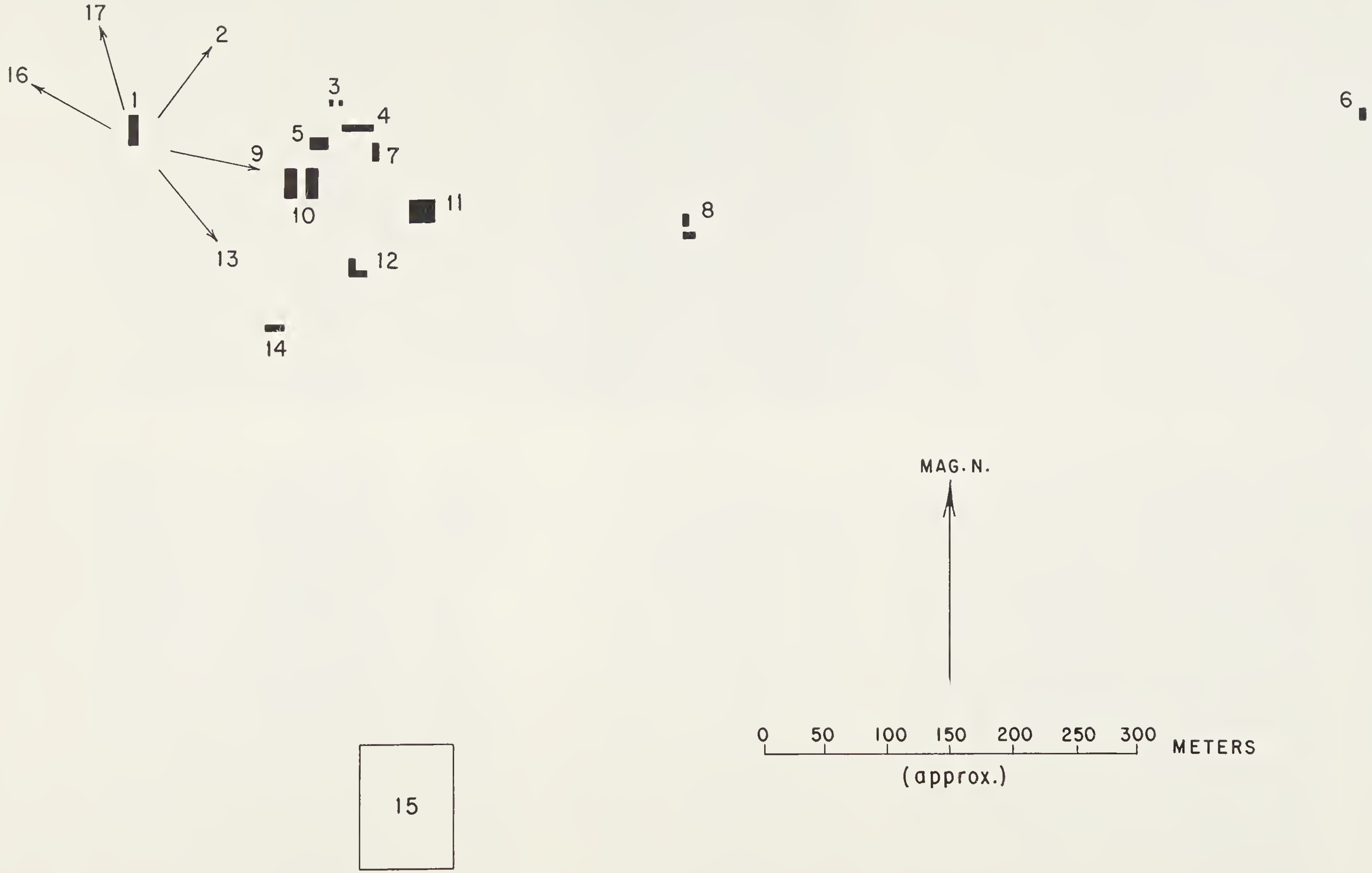


Figure 624. Sketch map of Xculoc and nearby ruins: 1, Northwest Hilltop Building; 2, San Simon, approx. 4 km at 37°, magnetic; 3, Portal Vault; 4, Wide-Vault Building; 5, Building; 6, Standing Building, approx. 1 km at 89°15′, magnetic; 7. Building of the Sculptured Columns; 8, Standing Group, approx. .5 km at 99°, magnetic. 9, Xcochkax, approx. 2.5 km at 102°, magnetic; 10, Ball Court; 11, Pyramid; 12, Palace of the Figures; 13, Naox, approx. 2 km at 141°, magnetic; 14, building; 15, Xculoc village plaza, approx. .6 km at 160°, magnetic; 16, Sisila (?), approx. 8 km at 300°, magnetic; 17, Bobil, approx. .6 km at 345°, magnetic. Note: magnetic declination (1940) approximately 7°15′ east.

THE CAMPECHE RUINS

5 · Xculoc and Adjacent Sites

Some 20 km west of the great city of Sayil, and about the same distance from Kabah and Uxmal, across the state border and in Campeche, is a small tract of hills and savanna only 5 or 6 km in extent that harbors a relatively high concentration of ruins. The little site of Bobil is at the northern limit of the region, while Almuchil and Chunhuhub form the southern boundary (frontispiece). The good-sized ruins of Xculoc are possibly the most important of the half-dozen sites in the area. These ruins display an architecture that is much like what we have seen across the border in Yucatan, but they also show certain architectural traits that were observed sparingly in Yucatan but appear to be relatively frequent in many of the Campeche ruins. In exhibiting an architecture closely similar to that of the Yucatan ruins but in certain respects characteristic of the Campeche sites, the remains of the Xculoc region seem to provide a natural transition and a good beginning for our description of the Campeche ruins.

Xculoc

ETYMOLOGY

Maler (1902, p. 208) gives *xculoc* = without feet, and adds that the name comes from the carved figures in the frieze of the Main Palace, or Palace of the Figures (see below). Roys (personal communication) gives credence to Maler's translation but says he does not know how Maler derived it. I have seen the translation, short legs, on a label in the Museum of Archaeology in Merida. Variant spelling: Xculhoc, Schoolhoke, Xchonlok. Other name: Chunhuhu.

SITUATION

Approximately 20 km east of Xcalumkin and the same distance west of Sayil. Kabah and Uxmal are also about 20 km from Xculoc.

TOPOGRAPHY

Center of site and vast proportion of construction located on floor of valley surrounded by hills. Some outlying buildings on hilltops.

WATER SUPPLY

No known natural permanent supply of water, but very likely rock basins, or sartenejas, that hold water during rainy season. Many underground cisterns (chultuns) in ruins. Modern well in village of Xculoc, .5 km south of ruins.

MAP

No true map of site. Sketch map of Xculoc and nearby ruins approximately locates several of the better preserved structures (fig. 624).

SIZE

Center of site, which contains large amount of construction, occupies an area about 300 m square. Several groups of buildings and isolated buildings observed at distances of 500 m or more from center of site, but intervening areas not explored and extent of ruins beyond central group not known.

CIVIC PLAN

Not well understood owing to lack of adequate map. Center of city a compact group of contiguous courts, terraces, and buildings. A pyramid seems to be more or less centrally located. There are numerous small structures that appear to have been dwellings or related domestic buildings, but I have no record of their locations. Outlying structures and groups of buildings seem to favor hilltops, or at least natural rises, as locations, but the limits of the city and the composition of the areas between the center and the outlying ruins are not known. The most important known characteristic of the site is the dense concentration of building remains at the center.

Orientation. Axis of Portal Vault approximately 2°30′ east of north, magnetic, or about 9°45′ east of true north. No other orientation of building recorded.

REFERENCES

Maler 1902, pp. 208–210.
Ruz 1945, pp. 44–45, 79.
Stephens 1843, 2:133–135.

Palace of the Figures
(Main Palace)

This building lies a short distance southwest of the central pyramid (fig. 624). The structure is L-shaped, consisting of a northern and eastern wing, the latter of which is fallen. The building seems to have faced primarily on the courtyard formed by the two wings. Maler (1902, p. 209) says there were six rooms, two in the north wing that were entered from the east (fig. 625a), two in the east wing that were entered from the north, and two narrow rooms—one behind the other, at the corner where the two wings meet—that were entered from the south. Stephens (1843, 2:134) says the rooms in the north wing were "each thirteen feet [3.96 m] long by eight feet six inches [2.59 m] deep."

SUPERSTRUCTURE

Plan. See description above.

Elevation. See figure 625a; and Stephens 1843 (vol. 2, facing p. 134, labeled Chunjuju), and Maler 1902 (fig. 9).

Base Molding. Three-member molding with colonnettes in middle member at rear (west) of building (fig. 625b). Same at front (east) of north wing but with step-and-fret design (fig. 626; and see Ruz 1945, fig. 6:7) cut from single stone and spaced across building with colonnettes between.

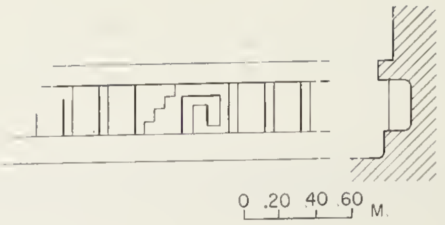


Figure 626. Xculoc, Palace of the Figures, North Wing. Elevation and section of base molding at east.

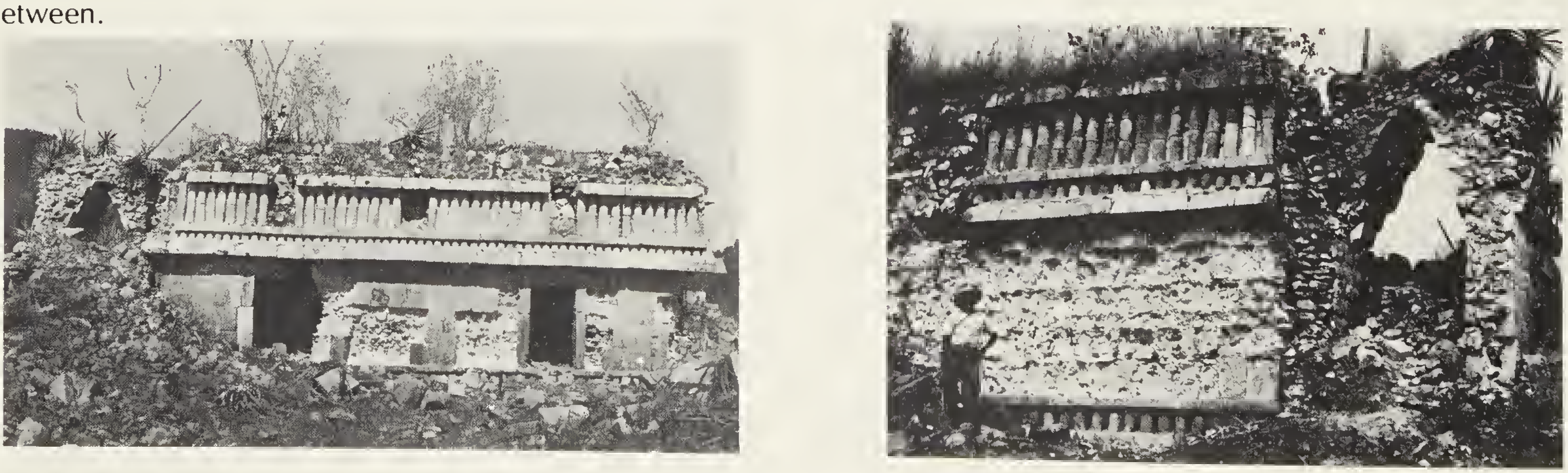
Walls. Thickness of .52–.56 m at doorjambs. Finely dressed and fitted facing stone. Break in construction at level of top of lintels, bottom of medial molding, one course below spring of vault. Break marked by finished plaster cap, of same buff color as floor, that rounds over top of wall at level just described (cf. fig. 147a).

Vaults. Highly arched. Rather wide capstones, specialized vault stone (fig. 625b).

Moldings. Three-member medial molding of apron, colonnettes, and rectangular string course (fig. 625). Cornice molding same (Stephens 1843, facing 2:134) but with addition of usual outward-leaning coping course (see Maler 1902, p. 209).

Decoration. Lower wall zone plain but for three banded split columns at each corner of building (ibid.). Upper zone of split columns (fig. 625) interrupted by three atlantean-like figures over doorways and at center of facade of north wing (see Maler 1902, fig. 9). In 1936 these figures had been removed from the building and placed in modern walls (fig. 627) in the village. They are now in the Archaeological, Ethnographic, and Historical Museum of Campeche (Pavon 1942, p. 50). For comments on the art of these sculptures see Ruz 1945, p. 44; Proskouriakoff 1950, p. 168, and 1951, p. 115.

General. All other features of building are typically Puuc in style and workmanship.



a

b

Figure 625. Xculoc, Palace of the Figures: a, east facade of north wing, looking west, and showing gaps in frieze where atlantean figures previously stood; b, west facade of north wing, and standing portion of vault of inner southwest room, looking east.

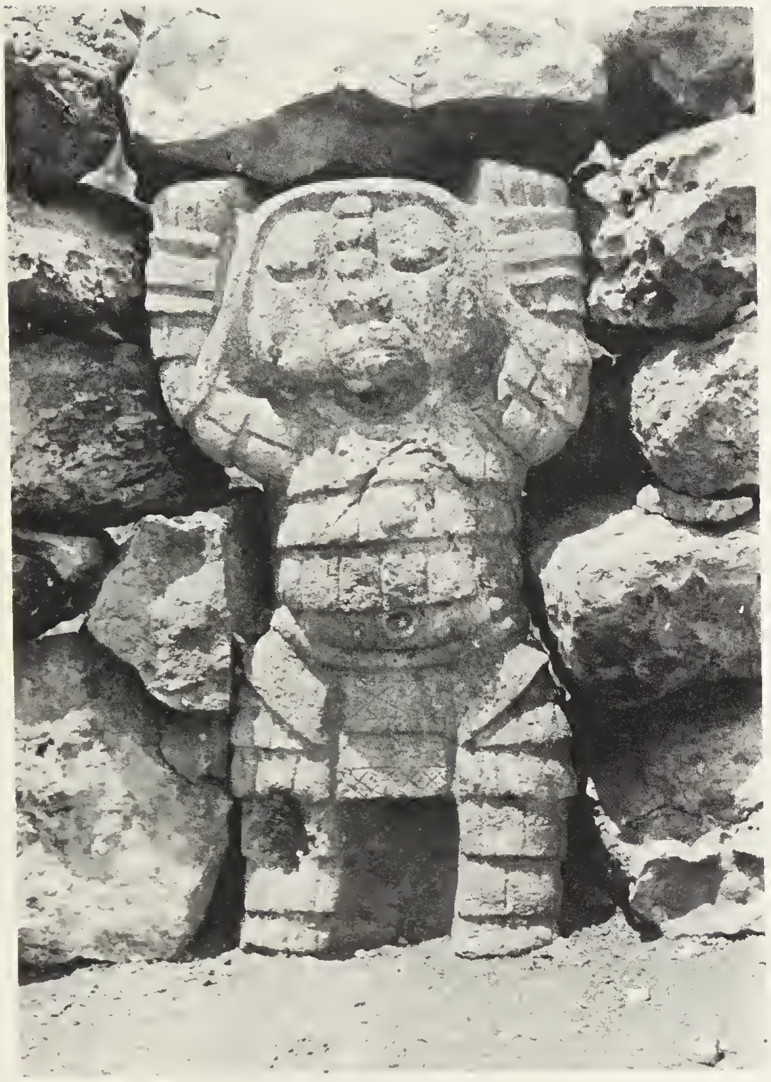


Figure 627. Xculoc, Palace of the Figures. Right (northern) figure from frieze on north wing, shown in modern wall in village (1936). Center figure is illustrated by Pavón (1942, p. 50).

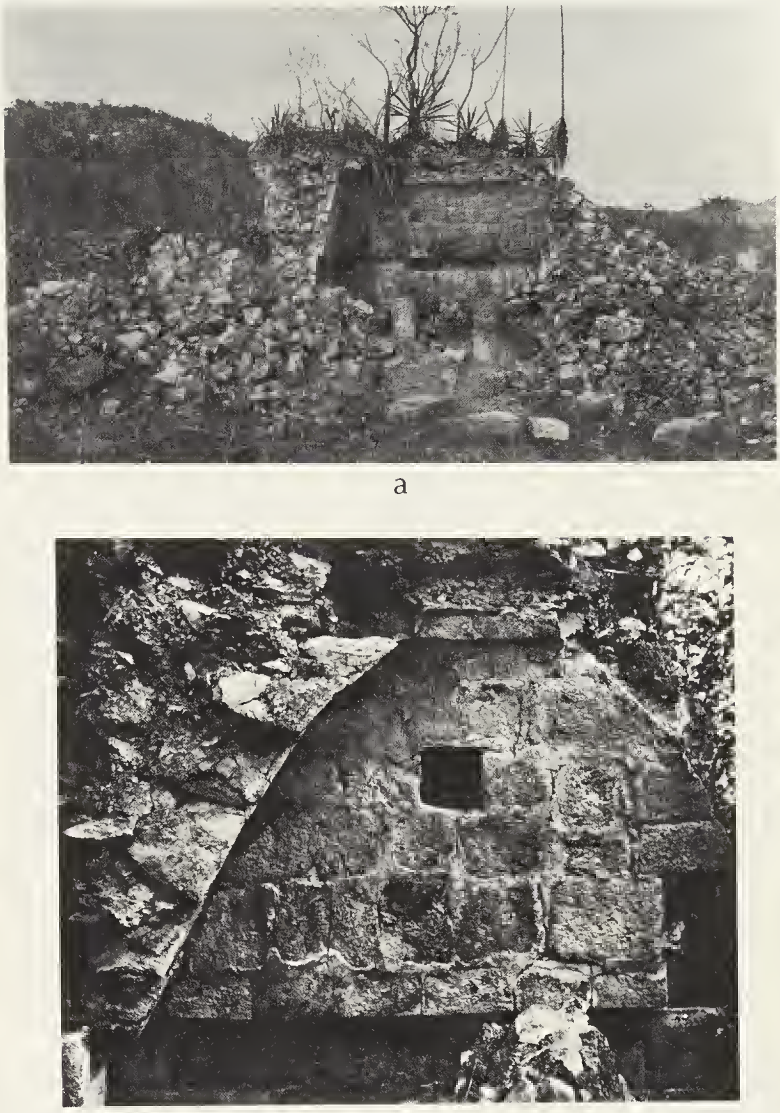


Figure 628. Xculoc, Building of the Sculptured Columns: a, remains of building, looking east, and showing sculptured columns of center doorway and rear wall and vault face of center room; b, south end of north room, looking south, and showing niche in end of vault and vault masonry in section.

Building of the Sculptured Columns

North of the Palace of the Figures and northwest of the pyramid (fig. 624) is a badly fallen structure that once consisted of three rooms in line along a north-south axis, all of the rooms facing west. Only the rear wall and vault face of the middle room, and the dividing wall and vault ends between the middle and north rooms were standing and visible at the time (1936) of my visit (fig. 628a). Also standing, but mostly buried until excavated, were two sculptured columns in the entrance to the middle room.

SUPERSTRUCTURE

Plan. See description above.

Construction. Walls rather thin (.48 m) at doorjambs (cf. Xcalumkin, Hieroglyphic Group, pp. 441, 444). Columnar entrance to center room. North and south rooms seemingly had simple rectangular doorways. Full-width jamb stones and stone lintels. Columns made of two drums each. Smoothly plastered niche in south end of vault of north room (fig. 628b). Vault stone varies from semi-specialized block to triangular shape (fig. 628b). A single stone from a rectangular member of the medial molding in place at rear of building. What may be thoroughly specialized coping stone in debris. Construction essentially Puuc.

Decoration. Central entrance to building carries extensive decoration in the form of sculptured columns, capitals, corbels, and lintels (figs. 629, 630). Each column presents an elaborately accoutered human figure that stands on a head or mask in profile (see Proskouriakoff 1950, fig. 101h, i). The capitals, of which only one from the south column was found, are carved with hieroglyphs on all four sides (fig. 631a; and ibid., fig. 101g, mislabeled "capstone"). Each corbel is carved on the front edge and on the face (fig. 631b; and ibid., fig. 101e) with hieroglyphs, and the three lintels are carved with elaborately dressed human figures on the undersurfaces (fig. 632; and ibid., fig. 101a-c) and with hieroglyphs on the front and rear edges

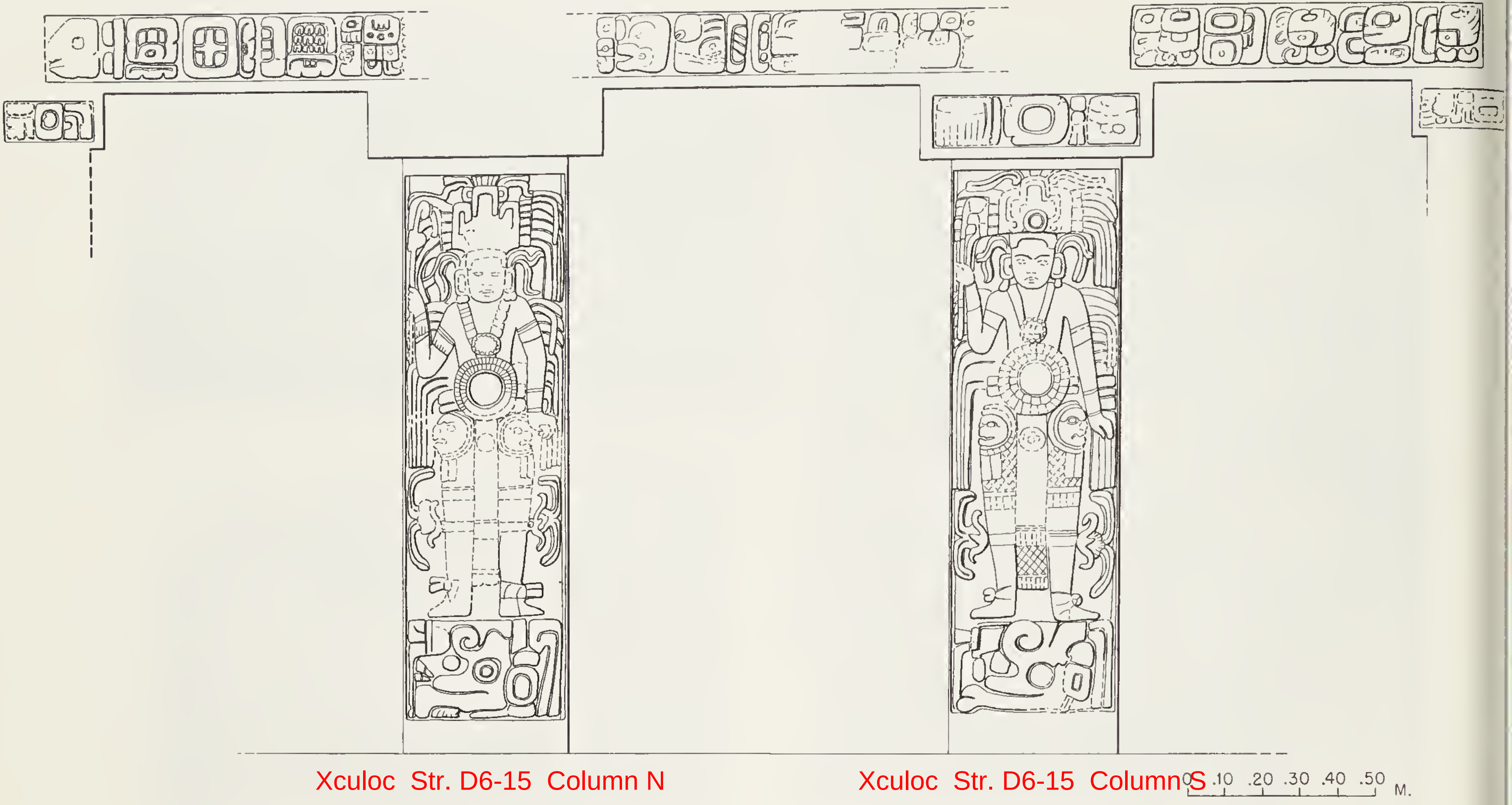


Figure 629. Xculoc, Building of the Sculptured Columns. Restored elevation of entrance to center room.

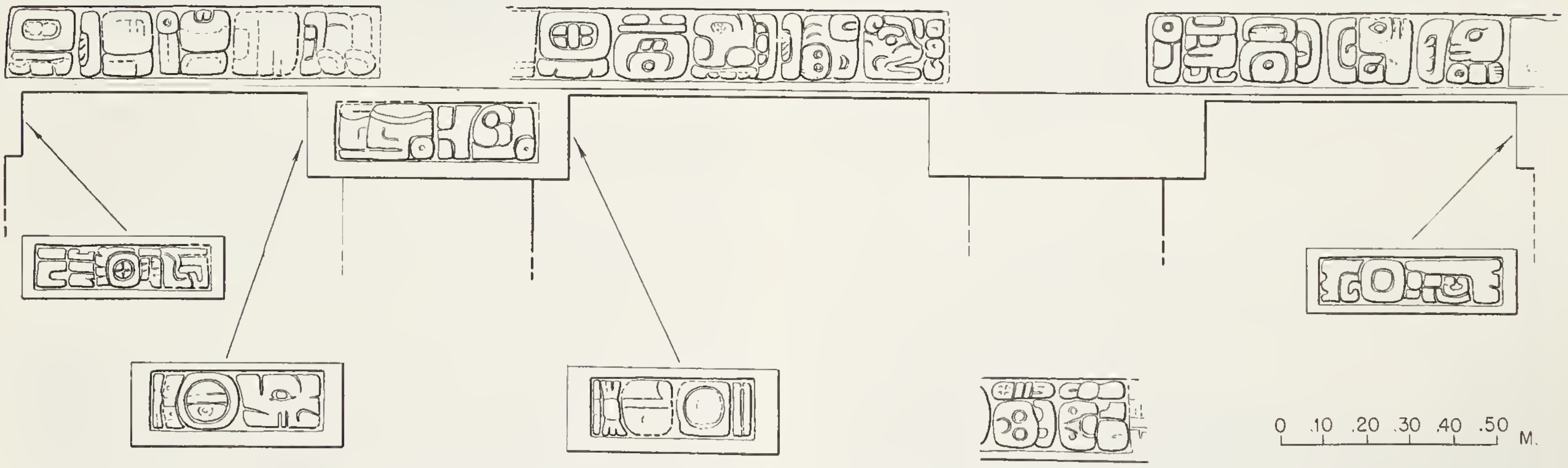


Figure 630. Xculoc, Building of the Sculptured Columns. Entrance to center room. Carving on rear edges of lintels, on faces of corbels at top of jambs, on rear and sides of capital on south column, and on odd stone from glyphic band.

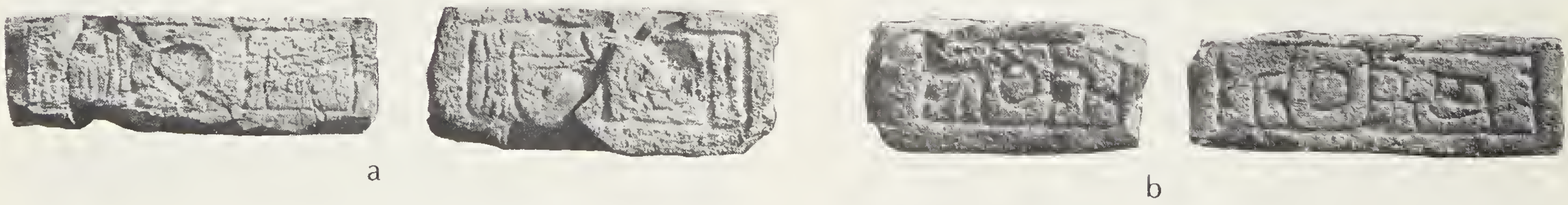


Figure 631. Xculoc, Building of the Sculptured Columns. Entrance to center room: a, front and side of capital on south column; rear and other side are illustrated by Proskouriakoff (1950, fig. 101g); b, front edge and face of corbel on north jamb; face of south corbel is illustrated by Proskouriakoff (1950, fig. 101e).

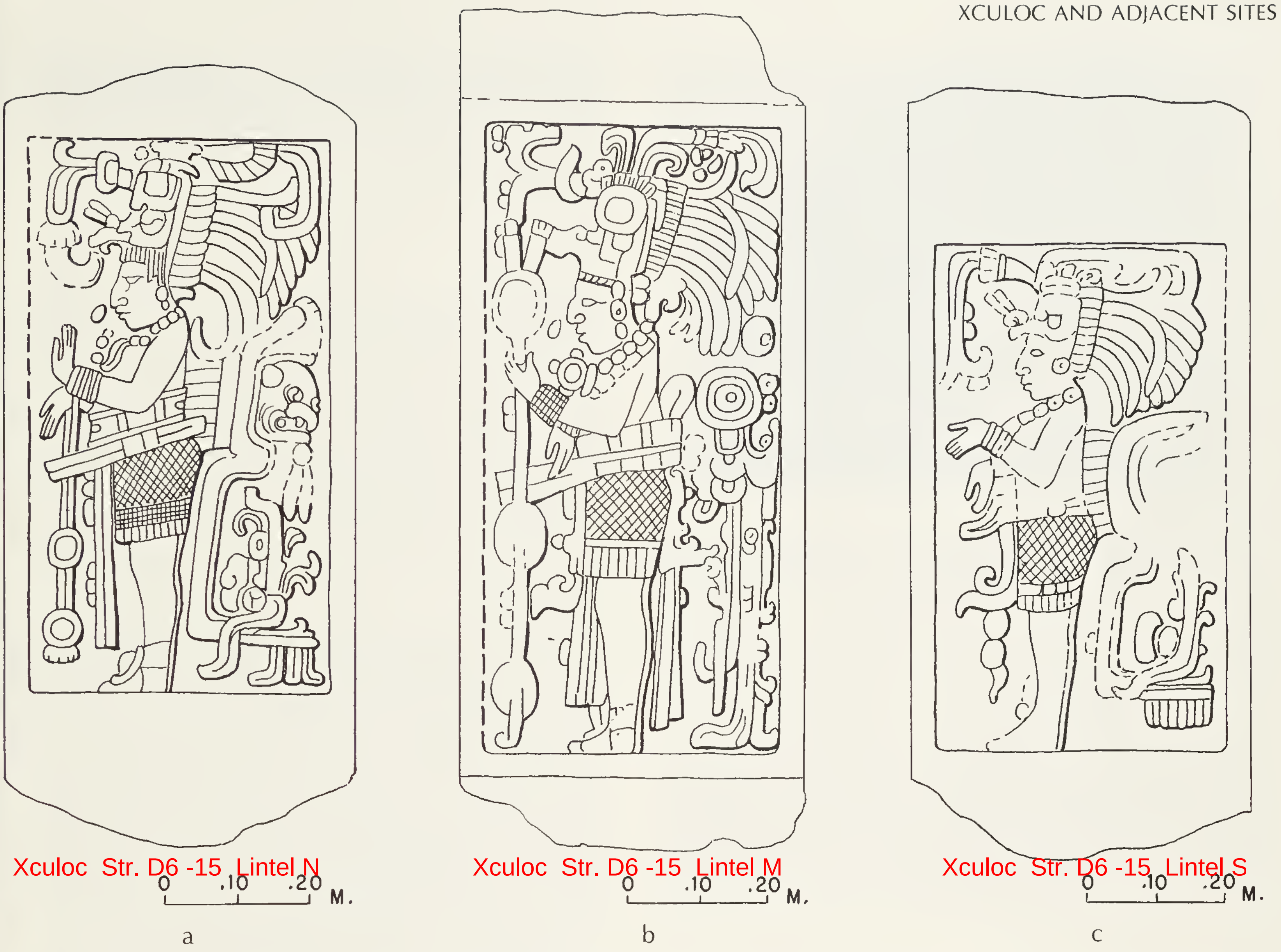

Xculoc Str. D6 -15 Lintel N
0 .10 .20 M.
a
Xculoc Str. D6 -15 Lintel M
0 .10 .20 M.
b
Xculoc Str. D6 -15 Lintel S
0 .10 .20 M.
c

Figure 632. Xculoc, Building of the Sculptured Columns. Entrance to center room: a, north lintel; b, center lintel; c, south lintel.

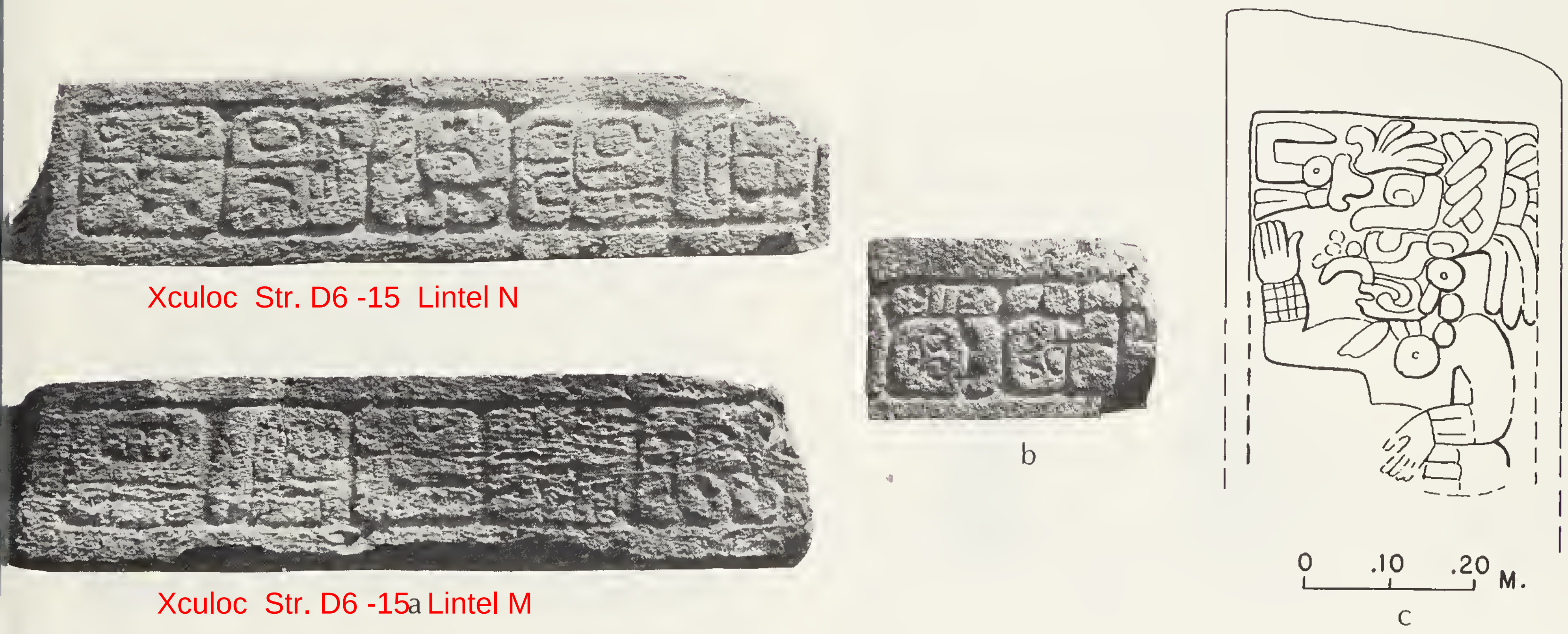


Figure 633. Xculoc, Building of the Sculptured Columns. Entrance to center room: a, south lintel, front and rear edges; center and north lintels are illustrated by Pavon (1942, pp. 44, 46); b, fallen stone from glyphic band; c, fragment of carved capstone (?).

(fig. 633a; and ibid., fig. 101f). This is the only instance I know of in Puuc architecture in which lintels are sculptured on the rear edges. A single stone with hieroglyphs on it was found in the debris (fig. 633b). It may have come from a band of glyphs of which either the front or rear edges of the lintels were a part, but this is conjecture. Found in the debris also was the fragment of a sculptured panel that seems to have been a capstone (fig. 633c; and ibid., fig. 101d). The carving shows the head and upper torso of a human figure or deity. As previously mentioned (p. 357), carved capstones are found infrequently in the Puuc ruins. See Proskouriakoff 1950 (p. 168) and 1951 (p. 115) for discussion of sculpture referred to above, a number of pieces of which are now in the Archaeological, Ethnographic, and Historical Museum of Campeche (see Pavon 1942, pp. 44, 46, 49).

On the northern end wall of the middle room, both above and below the offset at the level of the spring of the vault, are traces of mural painting. Blue, green, yellow, and red colors can be identified, but nothing of the subject can be made out.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

The north and south openings of the columnar doorway to the middle room were blocked by secondary walls (cf. Sayil, Str. 4B1, p. 121). It is highly probable that the sculptured columns were covered with plaster. Proskouriakoff (1950, p. 168) suggests that the carved lintels over the doorway were of earlier manufacture and were reused in this building.

Portal Vault

Structure lies about 50 m northwest of Building of the Sculptured Columns (fig. 624). Portal Vault stands alone in manner of Structure 1B1 at Kabah (see p. 155). Vault spanned distance of 3.89 m (fig. 634a). Stairway at north leads down to approximate ground level where there may be a causeway, presumably with same axis (2°30′ east of north, magnetic) as that of Portal Vault. Probably also was stairway at south leading down to court level. I have no further notes on this building, but judging from photograph (fig. 634b), structure seems to be of typical Puuc construction. Simple rectangular medial molding like that on portal vault at Kabah.

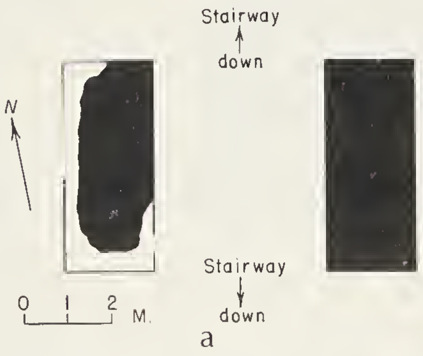
Ball Court

Some 60 m south of Portal Vault and 50 m or less west of Building of the Sculptured Columns is a ball court (fig. 624). The structure is in ruinous condition but enough remained to make a sketch plan and section. The ball court, the long axis of which runs north and south, appears to be of the broad, sloping bench variety, like Structure 4B3 at Sayil (see p. 131), probably like Structure 2B9 at Oxkintok (see p. 288), and Acosta and Moedano's (1946, pp. 381–382) Type B.

Plan and Section. See figure 635. All measurements approximate.

Construction. Height of face of bench about .75 m and slope of bench carries upward about another .75 m so that foot of playing wall is approximately 1.50 m above floor of playing alley. Playing wall estimated to be 2 m high but upper surface of each range behind bench is badly eroded. Impossible to tell without excavation if either range carried any superstructure. Amount of debris on top suggests no superstructure, or at least not a vaulted building. Traces of plaster floor of playing alley and of plaster surface of west bench still visible. Such masonry as was observed seemed to be of Puuc variety.

Northern end zone clearly outlined by high vertical wall at north and west that falls off 2 m or more from level of floor of ball court. At the east, this end zone is limited by a step up to a slightly higher level. Southern end zone not immediately apparent.



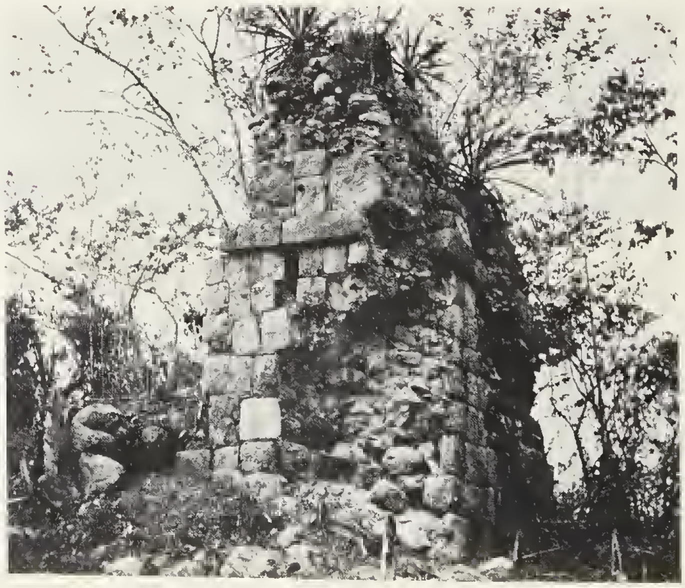


Figure 634. Xculoc, Portal Vault: a, plan; b, east pier, looking north, and showing wall masonry and medial molding.

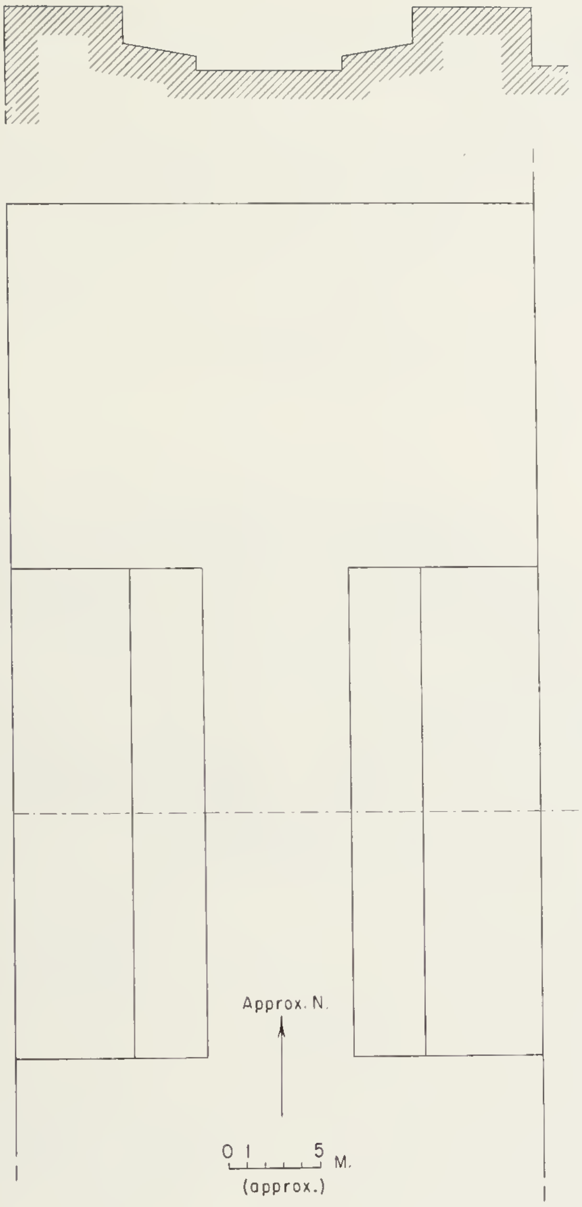


Figure 635. Xculoc, Ball Court. Sketch plan and transverse section.

In the northwest corner of the northern end zone was found lying on the ground the considerably weathered and headless stone sculpture of a human figure (see Miscellaneous Sculpture, M1, below).

Northwest Hilltop Building

A short distance west of the central group of ruins at Xculoc is a relatively high hill upon which stands a fairly well preserved building. It was from this location that the compass directions used in the sketch map (fig. 624) were taken. Unfortunately, my notes do not describe the plan of the structure, but I suspect it is the building that Maler (1902, p. 209) described as having three large chambers on the eastern front and three on the west. The masonry is of extraordinarily fine quality with beautifully cut, faced, and fitted wall stone, and finely worked and finished specialized and semispecialized vault stone (fig. 636). Doorjambs are full-width stones, excellently cut and dressed, and there are large stone lintels. Height from floor to spring of vault is greater than usual, and capstone span at top of vault is also larger than usual.

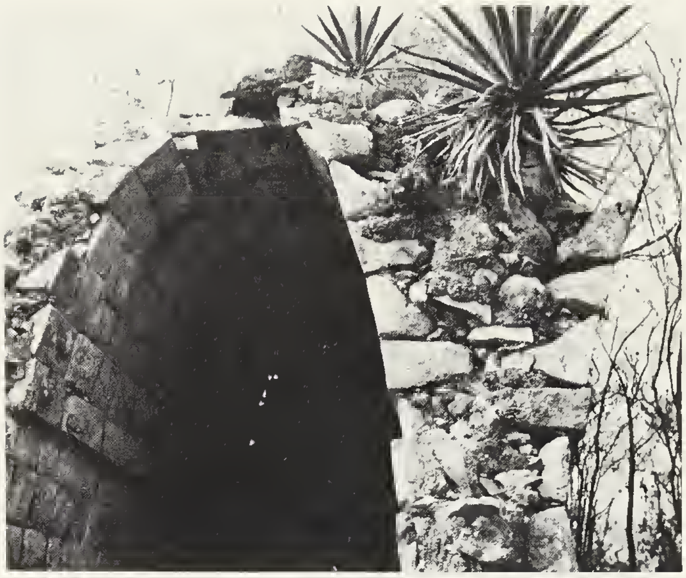


Figure 636. Xculox, Northwest Hilltop Building. One of rear rooms, looking north, and showing vault and medial wall in section.

The most interesting feature of this building is that the rear, northwest corner seems never to have been completed by the builders, and this is another example of exceptionally fine masonry associated with an unfinished structure (cf. Str. 2C7, Kabah; Unfinished Building, Uxmal; Str. 2C1, Oxkintok).

Other Buildings

Several outlying buildings were observed but not visited, and Maler (1902, pp. 209–210) mentions a number of standing or partly standing structures besides those described above. Only one of these buildings, which he places "at some distance east of the Palace of the Figures" and calls one of a group of two structures, does he describe in any detail. I suspect the group is that shown as No. 8 on the sketch map (fig. 624). His description indicates building of typically Puuc design except that its base molding is more ornate than is usual. The masonry seems to have been of fine quality, comparable to that of the Northwest Hilltop Building (see above).

MISCELLANEOUS SCULPTURE

M1. Stone sculpture of corpulent human figure dressed in tight fitting, possibly quilted, costume (fig. 637a). Somewhat weathered; head broken off and missing. Total height of stone 1.55 m; height of figure 1.20 m. Found lying on surface of ground in northwest corner of northern zone of Ball Court.

The costume, the depressed disk on the chest, and the corpulent figure suggest sculpture is to be allied with small atlantean figures from Palace of the Figures (see above), sculptured doorway columns from Building of the Sculptured Columns (see above), and doorway columns from Sayil and Oxkintok (pp. 121, 303; and see Proskouriakoff 1950, pp. 167–168; 1951, p. 115).

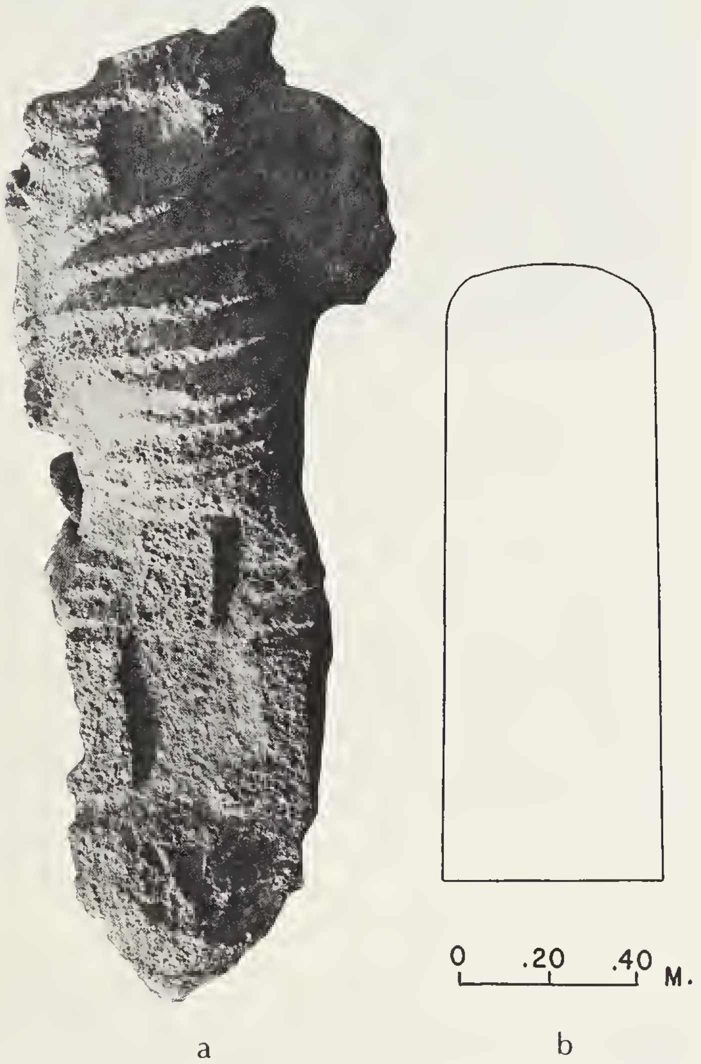


Figure 637. Xculoc. Sculpture and monument: a, M1, human figure of stone; b, Stela 1.

MONUMENTS

STELA

Stela 1. Probably plain (fig. 637b). Maximum height 1.39 m, maximum width .50 m, maximum thickness .22 m. Found on low platform, 3–4 m square, near center of court. Court not located in my notes.

Stela lying face up and surface so pitted one cannot be certain whether stone was plain or carved, though probably plain.

ALTARS

Altars. Large number of typical Puuc altars. Some very large, e.g., over 1 m high and .60 m in diameter. Altar in court at west of central pyramid sculptured with familiar mat pattern on side.

Bobil

ETYMOLOGY

Place of the *bob* tree, according to our Indian laborers. Roys (personal communication) agrees with this translation but notes that *bobil-che,* the *bob* animal of the woods, is a general term for the jaguar (see Roys 1931, p. 328). *Bob,* or *bob-che,* is *Cocoloba schiedeana* Lindau (ibid., p. 217). Variant spelling: X'Bobil.

SITUATION

About 1 km north and slightly west of Xculoc (see fig. 624).

WATER SUPPLY

Same as at Xculoc (see above). Chultuns, or cisterns, observed in ruins.

SIZE

Not known. Small group described here only part of site visited, but ruins seem to continue to the east and northeast, and partly standing building could be seen on a small hill 1 km or less to the northeast.

CIVIC PLAN

Not known. If area were thoroughly explored, site might be found to be part of a larger Xculoc.

Orientation. Axis of one building 10° east of north, magnetic, or approximately 17°15′ east of true north.

WEST GROUP

Small group of structures on three sides of a court that is open at the east. The south and west buildings are partly standing.

South Building

Two rooms in line on an east-west axis, each with a doorway facing north on the court (fig. 638a), and a completely fallen secondary addition at east end of building. Simple rectangular base molding of single course of dressed stone (fig. 638b). Exterior wall masonry of moderately well-faced and fitted stone; interior masonry considerably cruder. Simple rectangular doorways with well-cut, full-width jamb stones supporting heavy stone lintels. Small rectangular wall niche immediately below medial molding at center of west end of building. Three-member medial molding of lower apron member, decorated middle member (fig. 638b), and reverse-apron upper member. Cornice molding seems to have been the same but with upper member or coping course much higher.

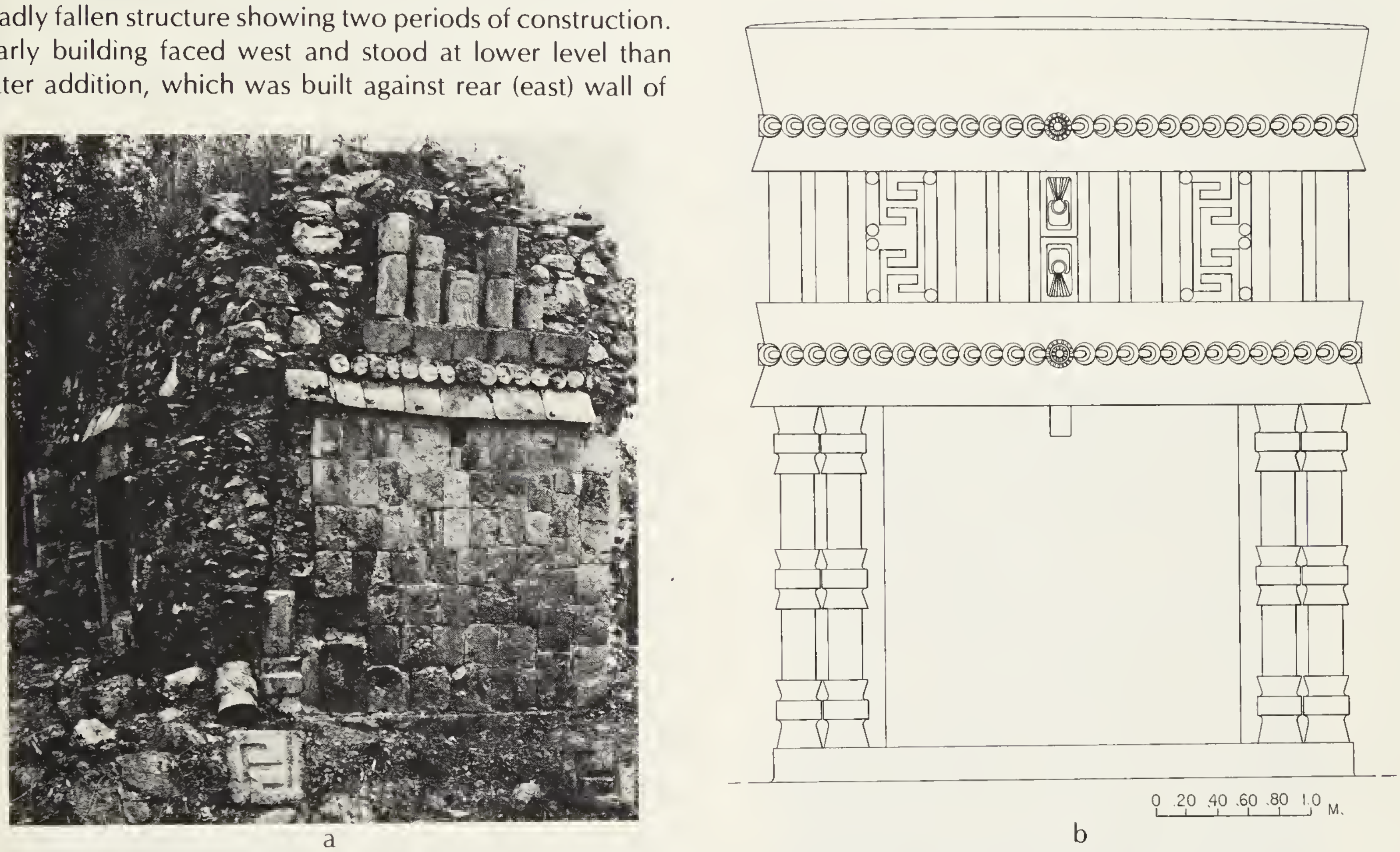
Lower wall zone decorated with three banded facade columns at each corner (fig. 638b). Upper zone carried split columns, frets, and a carved design at the center of the west end. Also a rosette at center of middle member of medial molding, and presumably of cornice molding, at west end of building.

No details of fallen secondary addition at east end of structure are visible without excavation.

West Building

Badly fallen structure showing two periods of construction. Early building faced west and stood at lower level than later addition, which was built against rear (east) wall of early building, the later structure facing east on court, at which level it rested.

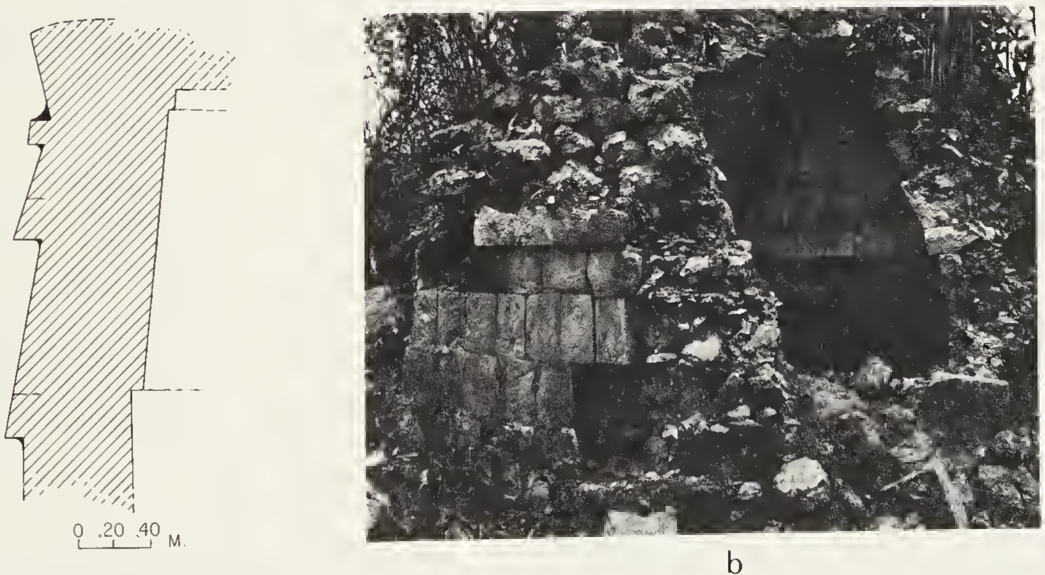
Early building employs moderately well-faced, moderately specialized vault stone, and soffit slopes are somewhat curved. Exterior upper facade is battered and is topped by a heavy three-member molding with considerable plaster still present in the angles between members (fig. 639a).



a

b

Figure 638. Bobil, South Building: a, view of structure from northwest; b, restored elevation of west facade.



a

b

Figure 639. Bobil, West Building: a, partly restored section of upper facade at north end of early phase of building; b, south room of later phase of building, looking north, and showing wall and vault masonry and large jamb stone.

Later addition, which covered rear wall of early building, had large jamb stones and large stone lintels, details which were not visible in the earlier building. In quite sharp contrast to the early structure, the later addition shows highly specialized vault stones, well-cut and dressed, some quite large, and the soffits are flat rather than curved (fig. 639b). The later vault is higher than the earlier.

Xcochkax

ETYMOLOGY

Roys wrote me: "It seems as though this must be the same as the *kaxil-ix-koch ('wild-ix-koch')*. Today the *x-koch* is the castor-bean, an importation, and I suppose the original *ix-koch* may well have resembled it." (See Roys 1931, pp. 254–256, for further discussion.) Variant (and probably correct) spelling: Xkochkax.

SITUATION

About 2 km east by south of Xculoc.

TOPOGRAPHY

Generally hilly terrain, and much of the building we observed is located on fairly steep slopes.

WATER SUPPLY

Same as Xculoc (see p. 377, above), including presence of underground cisterns (chultuns).

SIZE

Site not extensively explored. We gained the impression of a high concentration of ruins in an area of a few hundred meters in either direction.

CIVIC PLAN

Not well understood, owing to limited exploration and in the absence of mapping. Extensive use of hillside terracing, with structures on at least five ascending levels. Center of site holds a large amount of construction in a relatively small area, and thus exhibits a more compact pattern than is usual at Puuc sites.

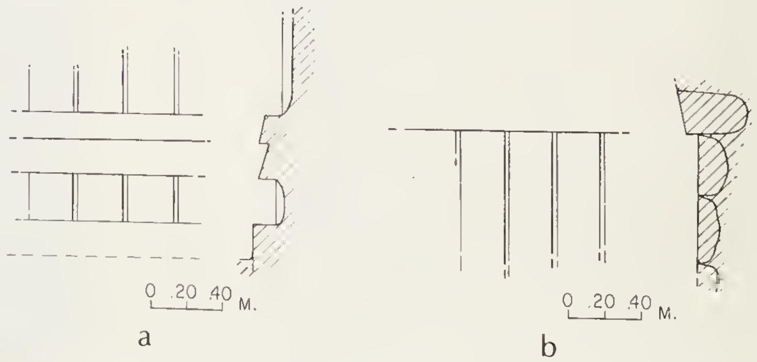
CENTRAL AREA

What seems to have been the heart of the site spreads over the eastern slope of a natural rise of bedrock that offered sufficient elevation for artificial terracing and the erection of buildings on five successive levels. The first tier of buildings starts near the southern edge of the hill, runs northward for a distance of five or six rooms, turns west for several rooms, then north again for three rooms. Before the southern rooms, which face east, is a broad terrace with a building on the south side, and what seems to have been a portal vault arched from the west end of that structure —which I am calling the Southeast Building—to the southern range of rooms. North of the series of structures at the foot of the hill is a building of two stories, the North Building, and still farther north another, badly fallen structure that is notable only in having a single-column doorway on the east side. The large column, with diameters of .70 m and .62 m, the latter equaling the wall width of the building, is somewhat flattened on the sides (cf. fig. 641b).

A large drum altar with an upper diameter of 1.07 m, lower diameter of .87 m, and a height of .94 m lay in the court before the Southeast Building, and a number of other altars in the central area were observed but not measured.

Southeast Building

Four-member base molding (fig. 640a) is visible on south side (rear) of building. Molding consists of rectangular member at bottom, then colonnettes, apron member, and string course at top. Wall masonry of well-cut, faced, and fitted stone. Doorways had full-width jamb stones and large well cut stone lintels. May have had columnar entrance, since rectangular stone with three-member molding carved on three sides (cf. fig. 602)—that may have been capital from column or corbel from top of jamb—was found on top of debris near center of north side of building. Only lowest number of medial molding, an apron member, is standing. Lower wall zone carries decoration of split columns (fig. 640a) that appear to be continuous across south side and probably occurred between doorways on north side. At the west end of the building a group of three split columns was centered in the lower wall zone (fig. 640b), which was plain from there to each corner. There apparently were large banded three-quarter columns at the corners, as the lower band and part of a column can be seen at the northwest corner. What seems to have been a portal vault, arched from the west end of the structure to the south range of rooms of the First Tier of buildings at the foot of the hillside, described previously. The portal vault, which may have been built secondarily to both buildings, rose from the level of the medial molding of each structure (fig. 640b).



a

b

Figure 640. Xcochkax, Southeast Building: a, elevation and section of base molding and facade decoration at rear of building; b, elevation and section of west wall, showing split columns and spring of portal vault.

First Tier

SOUTH RANGE

This building, which rests at the foot of the eastern slope of the hill on which the central part of Xcochkax is located, consisted of five or six rooms in line along a north-south axis and faced east toward the court it shared with the Southeast Building. The southern end of the structure is so fallen that one cannot be sure without excavation just how many rooms there were. At the northern end are two rooms, each with a columnar entrance, that were separated by a projecting stairway, apparently of secondary origin. The south range is partly buried by terracing for a second story, or at least a building at a higher level, on its west side (rear) and by the widening of the stairway just mentioned. This last construction would have sealed off the rooms on each side of the earlier stairs but for low vaulted passages that preserved access to those chambers (fig. 641).

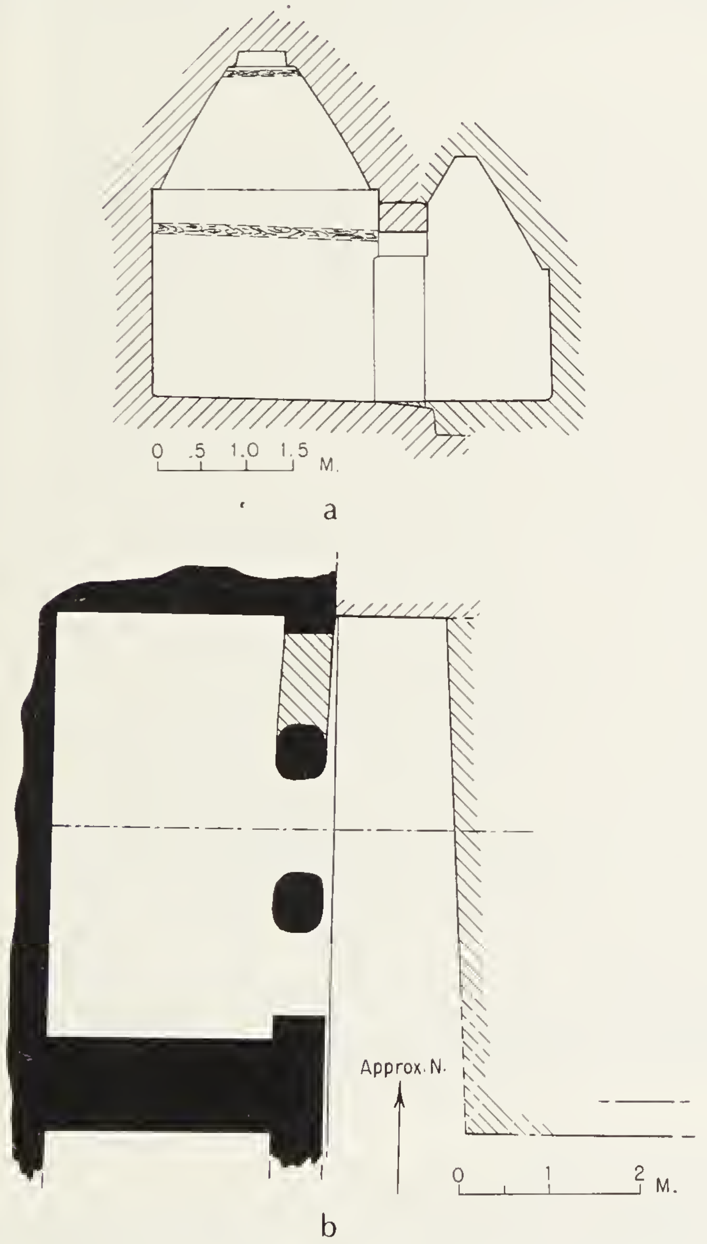


Figure 641. Xcochkax, First Tier, South Range, south room behind stairway: a, transverse section; b, plan.

The building originally had a simple rectangular base molding, .27–.28 m high and painted orange red, that was subsequently buried, at least in front of the southern room with columnar entrance, by a later floor (fig. 641a). The original stairway that stood between the two northern rooms, each with its double-column entrance, was of conventional design, with risers .28 m high built of well-cut and faced stones, and treads .24 m deep. Later, this stairway was widened by over 5 m on each side, and ramplike balustrades .40 m wide and made of well-cut and faced stone were added (fig. 642). The broad new staircase completely covered the facades of the rooms on each side of the old stairway, and low vaulted passages were constructed beneath the new stairway to preserve entrance to those rooms (fig. 641).

The columnar doorways employ full-width jambs stones surmounted by corbels, and the usual well-cut capitals and lintels of stone (fig. 643a), but the columns are flatly rounded, almost rectangular in section, and are made

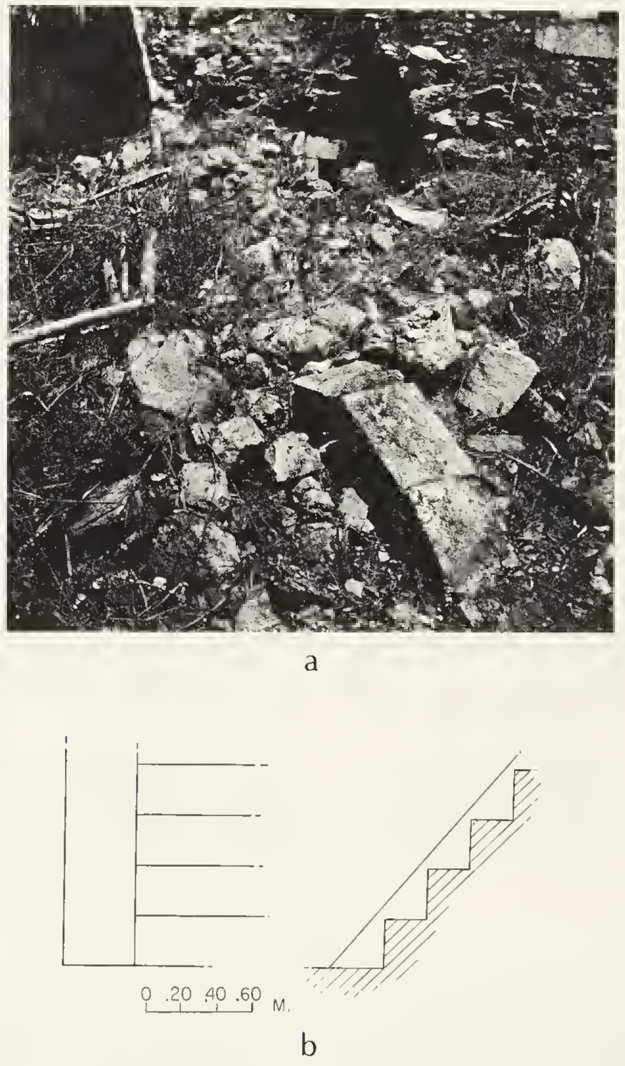


Figure 642. Xcochkax, First Tier, South Range. Stairway: a, south balustrade, looking northwest, and showing remains of stairway in background; b, restored elevation and section of lower steps and south balustrade.

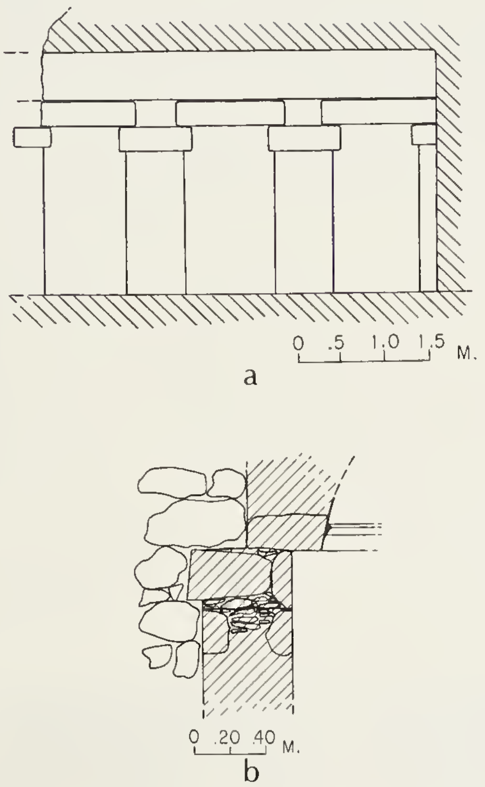


Figure 643. Xcochkax, First Tier, South Range: a, elevation of entrance to south room behind stairway; b, section through medial molding and spring of vault on rear wall of room south of room in figure 641.

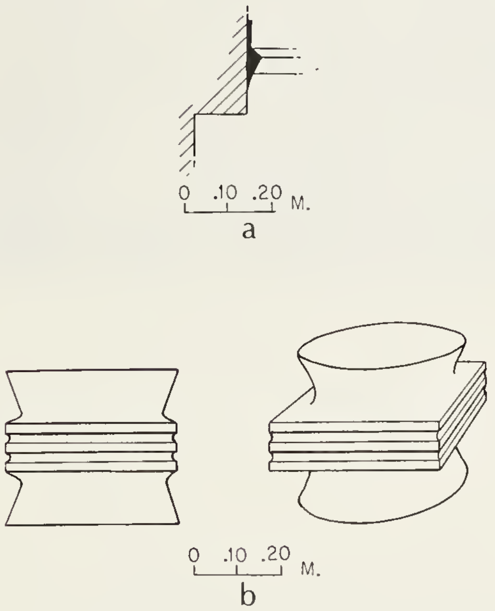


Figure 644. Xcochkax, First Tier, South Range: a, detail of plaster molding above spring of vault (see fig. 643b); b, elevation and perspective drawing of decorative element found north of stairway.

of an exceptionally poor-quality stone with many cavities that were filled with small stones and mortar. At some time, most probably when the stairway was widened and the vaulted passages beneath it were built, the opening between the northern column and jamb of the entrance to the room south of the stairway was blocked by a secondary or tertiary wall (fig. 641b), and a tiebeam was laid from the rear wall of the room to this new wall (fig. 641a). Vaults are made of well-cut and fitted, semispecialized stone, and are conventional in design except that they lack offset courses beneath the capstones of the low vaults over the passages beneath the stairway (fig. 641a). Only one course of the medial molding (fig. 643b), which carries a very slight batter, is preserved at the rear of the building where it is buried by the secondary fill of the terrace that supports a building on a higher level.

Traces of mural painting were observed on the walls of the room south of the stairway, including what had been a band of hieroglyphs in black line on the north wall just below the level of the spring of the vault, and fragments of an unusual stucco molding just above the level of the spring (figs. 643b, 644a) remained in the next room to the south. A large and most unusual spoollike element (fig. 644b) lay on the ground north of the stairway.

MIDDLE RANGE

As explained above in the description of the central area, the middle range of the first tier of buildings is a series of rooms on an east-west axis that run westward from the northern end of the south range. The walls are faced with well-cut, dressed, and fitted stone on the exterior surfaces, and less well-cut and fitted stone on the interior, a standard procedure in Puuc architecture. Doorjambs are of full-width, well-cut stones (fig. 645) and they support stone lintels. The most interesting feature of the structure is the design of the vaults, which are extraordinarily low (1.23 m from spring to corbel under capstone) in proportion to width (2.87 m). It is quite certain that these vaults could not have been built without a form or support of some sort to hold the stones in place until the mortar hardened (fig. 645). The vaults are built of a mixture of specialized and semispecialized stone, and the rough exterior backing of the vaults, which was later covered by the upper facade masonry, rose on a pronounced batter. There seem to have been two beams in each room at the level of the top of the lintel and bottom of the medial molding. Two members of the medial molding—a lower apron member surmounted by colonnettes set on a batter (fig. 645)—are still in place. Originally there was probably a third upper member, either rectangular or apron in form (cf. fig. 647).

NORTH RANGE

Running north from the west end of the middle range just described, the north range is a badly fallen structure of three rooms along a north-south axis. The building faced east and was obviously built in several parts that were later joined. At the center was a long room, and in the debris

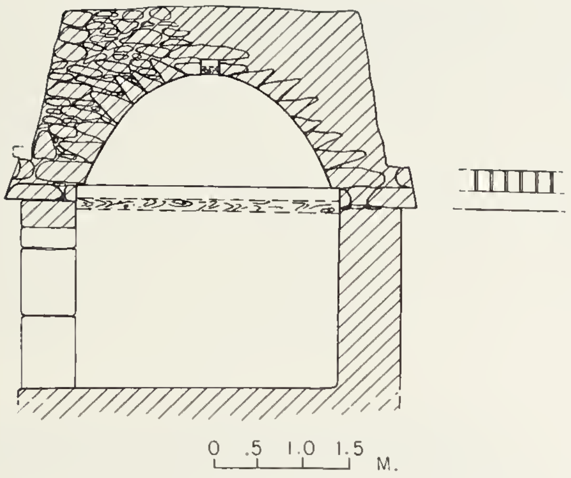


Figure 645. Xochkax, First Tier, Middle Range. North-south section and detail of medial molding.

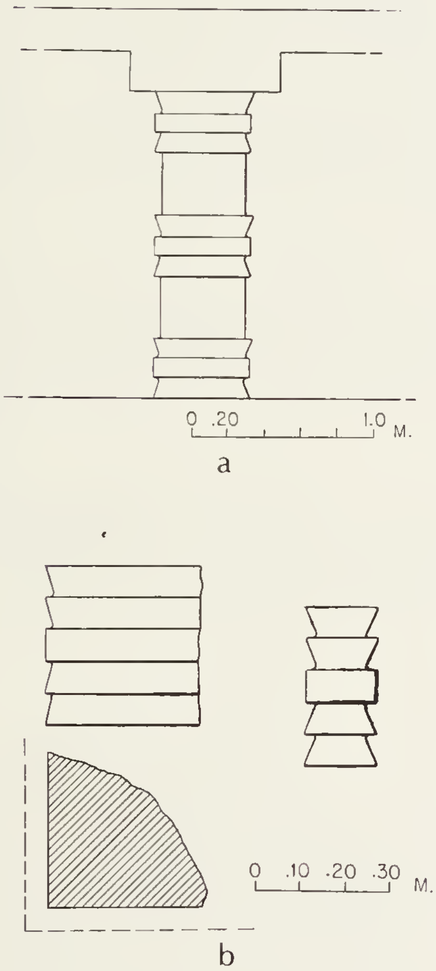


Figure 646. Xochkax, First Tier, North Range: a, restored elevation of column in doorway; b, elevations and plan of banded elements from north end of building.

at the east side were parts of large banded columns, .45 m in diameter, that indicated a multiple entrance with columns, as shown in figure 646a. The northeast and northwest corners of the building seem to have carried banded three-quarter columns, the bands being of five elements rather than the usual three, with the lowest band being rectangular in plan instead of round (fig. 646b). Also found in the debris was a banded element of smaller diameter.

North Building

North of the north range of the first tier of buildings in the central area of the site is an isolated structure of two stories. Although the plan of this badly fallen building is obscure, it can be seen that the masonry was of well-cut, faced, and fitted stone with full-width jamb stones and large well-cut lintels. A little room, which may have been intended as a burial or storage chamber, is exposed in the upper part of the mound. The only entrance is a small passage in the south end that was probably entered through the floor of the upper story. The room is approximately 2.50 m long, 1.50 m wide, and 2 m high. It is crudely made with heavily plastered walls and floor.

Second Tier

The only building of the second tier of construction in the central area on which I have any information stands on a hillside terrace behind (west) the south range of the first tier. As mentioned earlier, the terrace, which rises to the height of, or a little above, the first-tier buildings, was built against the rear wall of the south range, and the second-tier building supported by the terrace was approached by the stairway projecting from the facade of the lower structure. The upper building, which might be thought of as a second story, faced east to the stairway and overlooked the court in front of the south range and the Southeast Building. Only one room is standing.

SUPERSTRUCTURE

Plan. Not recorded, but apparently at least two rooms, and possibly more, in line on a north-south axis and facing east.

Sections. See figure 647a.

Base Molding. Simple rectangular molding formed by course of well-cut stone only .15 m high (fig. 648).

Floor. Heavy layer of lime concrete above rough work floor at level of top of base molding (fig. 647a). Floor finished with usual polished plaster surface.

Walls. Front wall only .45 m thick at doorjambs. Rear wall .60 m thick. Outer wall facing of well-cut, faced, and fitted stone (fig. 648); inner facing much rougher, and considerable chinking between stones.

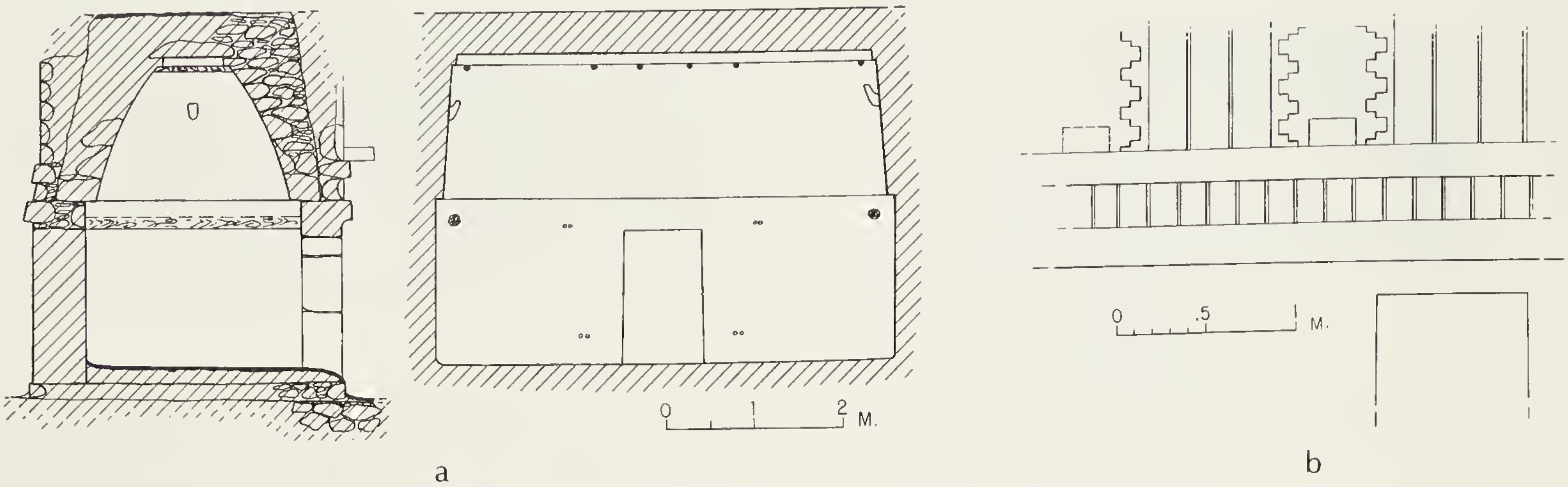


Figure 647. Xcochkax, Second Tier, standing room: a, transverse and longitudinal sections; b, facade detail.

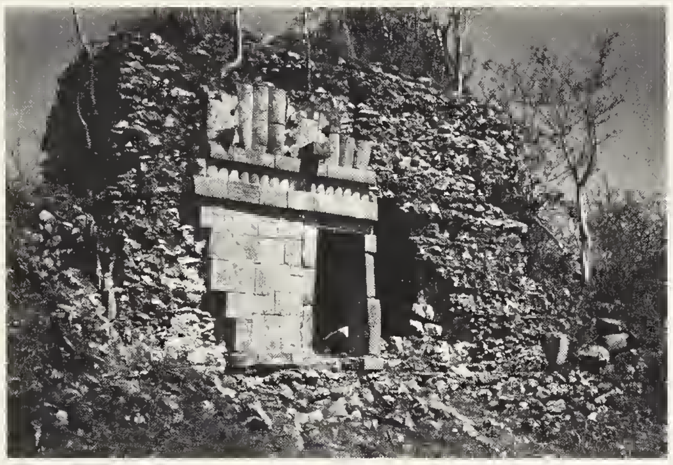


Figure 648. Xcochkax, Second Tier, standing room. View from southeast.

Doorway. Slight widening from top to bottom (fig. 647a). Jambs of full-width, well-cut specialized stones (fig. 648). Heavy stone lintel cut so as to include lowest member of medial molding (fig. 647a).

Wall Depressions and Projections. Two-hole variety of cordholders in pairs on inner wall at each side of doorway (fig. 647a).

Projecting cordholder in form of human foot tenoned into wall at each end of room (fig. 647a).

Vaults and Beams. Fairly well-cut, faced, and fitted semispecialized vault stone (fig. 647a). Capstone span wide in relation to size of vault. Rough face of masonry behind upper-facade veneer carries pronounced batter.

A beam once occurred at each end of room below level of spring of vault (fig. 647a), and six small beams below corbels under capstones.

Moldings. Three-member medial molding, each member slightly battered (fig. 647). Middle member is of colonnettes on front of building (fig. 648), but plain at rear. No cornice molding remaining.

Roof. Normal construction. Some of final plaster roof cap preserved.

Decoration. Upper facade at front of building carries groups of three split columns, separated by elements of stepped-pyramid design arranged vertically (figs. 647b, 648). Well-cut stones tenoned into wall just above medial molding that presumably supported stone or stucco figures now fallen. Plain upper facade at rear of building.

Vault and capstones painted a dark purplish red. Inner wall surfaces show traces of orange red paint.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

The terrace supporting this structure, and hence the building, seems to have been built after the south range of the first tier was started (see First Tier, South Range, above).

Third Tier

I have no notes on any structure from this level. Presumably no building was sufficiently well preserved to offer worthwhile architectural information without excavation.

Fourth Tier

West of the first and second tier of buildings described above, and near the crest of the hill on which the central area of the site is located, is a fairly well preserved L-shaped structure that faces south and east on a small court. The rear walls of the building are buried by yet another and final terrace, except for the easternmost room which stands free on three sides (fig. 649a). The roof of the structure is at the level of, and forms part of, the terrace behind the building.

SUPERSTRUCTURE

Plan. See figure 649a. Sketch plan.

Section. See figure 649b.

Base Molding. Simple rectangular molding of single course of well-cut and faced stone (fig. 649b).

Stairway. The axis of the vault of the second room from the west in the east wing is at right angles to the other

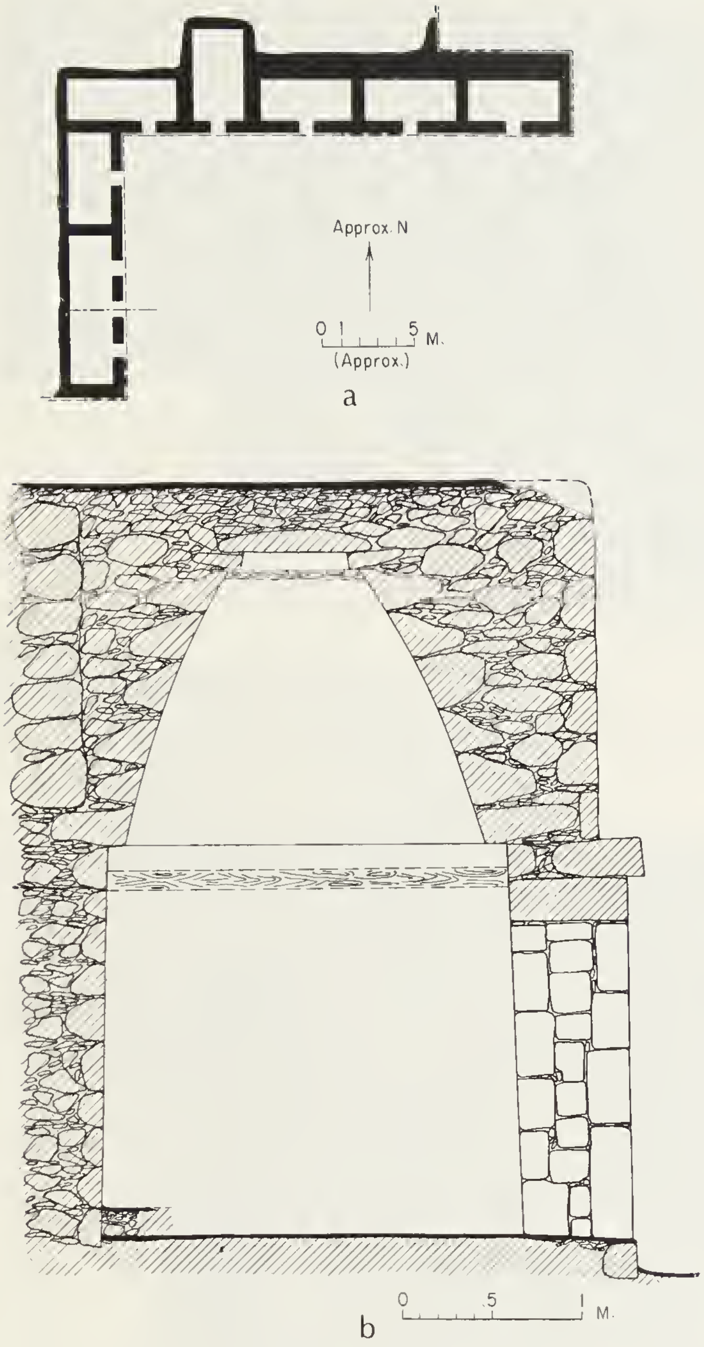


Figure 649. Xcochkax, Fourth Tier: a, sketch plan; b, transverse section through south wing.

rooms in that wing. One wonders if this room, which is filled with debris, may not have contained an interior stairway leading to the terrace and buildings above.

Floors. Remains of polished, buff-colored secondary floor .16 m above primary floor (fig. 649b).

Walls. Wall thickness at doorjambs of south room .60 m. No other wall measurements, but east room has very heavy rear (north) wall (fig. 650a). Buried rear walls of all rooms except east room seem to have had no exterior facing stone.

Exterior wall facing of well-dressed and fairly well-fitted stone (fig. 650); interior wall facing somewhat cruder (fig. 652a).

Doorways. Jambs built of two columns of cornerstones, dressed on two faces, and column of wall stone at center of jamb (fig. 649b). Stone lintels.

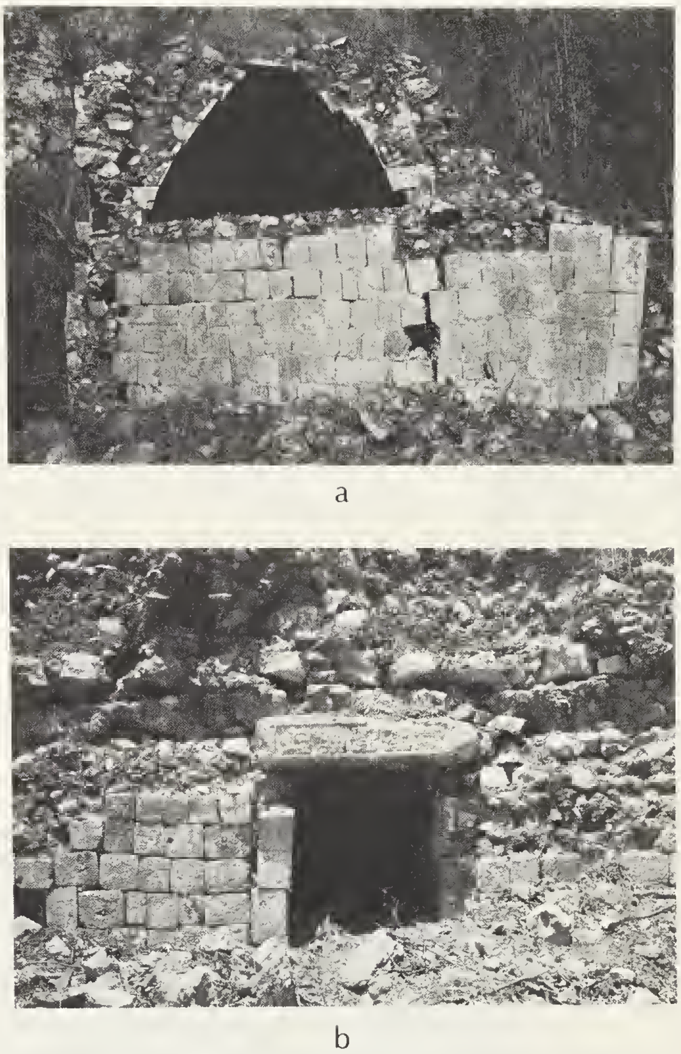


Figure 650. Xcochkax, Fourth Tier: a, east end of building, looking west, and showing heavy rear (north) wall; b, central doorway of south room, looking west.

Outer edge of lintel over center doorway in south room and outer edges of lintel and jambs of doorway in west room of east wing are sculptured (figs. 650b, 651c; and see Decoration, below).

Wall Depressions and Projections. Pair of cordholders of two-hole variety on inner wall at each side of most doorways (fig. 651b). Pair of ring cordholders or rod holders tenoned into inner wall face at each side of doorway to east room (fig. 651a).

Vaults and Beams. Soffit slopes slightly arched with most of curve near top (figs. 649b, 652a). Ends of vaults lean inward about .10 m from vertical. Span of capstones wide in proportion to width of vault.

Well-cut, faced, and fitted semispecialized vault stone (figs. 649b, 652). Underface of capstones seems to represent smooth cleavage, plain without further cutting. Rough face of vault masonry behind upper-facade facing is vertical (fig. 649b).

Sockets in walls indicate large beam about .60 m from each end of south room in course below spring of vault. Holes indicate five small beams at level below corbels

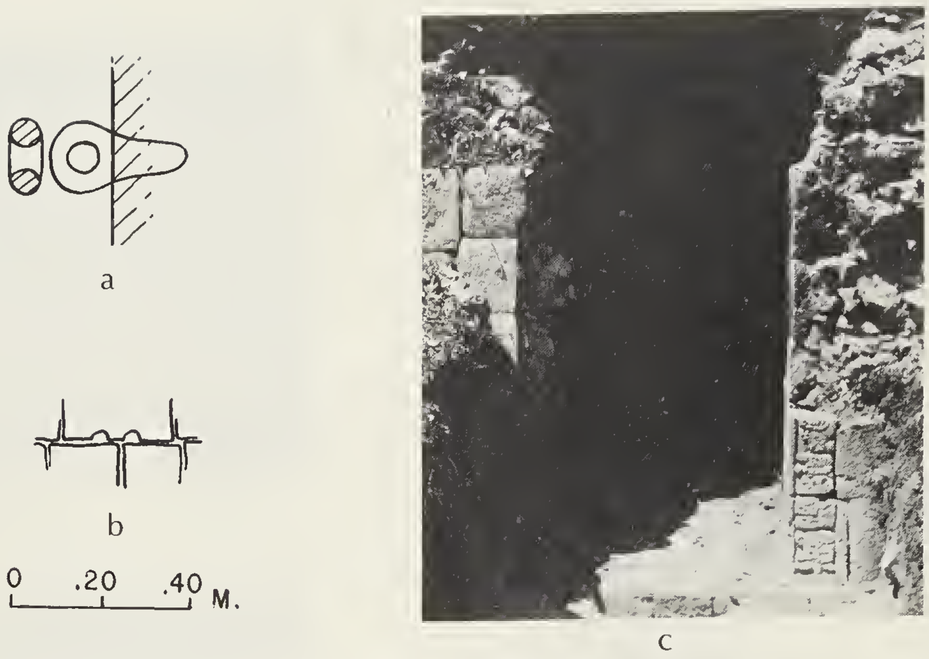


Figure 651. Xcochkax, Fourth Tier: a, cordholder in east room of east wing; b, variety of cordholder at each side of most doorways c, doorway to west room of east wing, looking north.

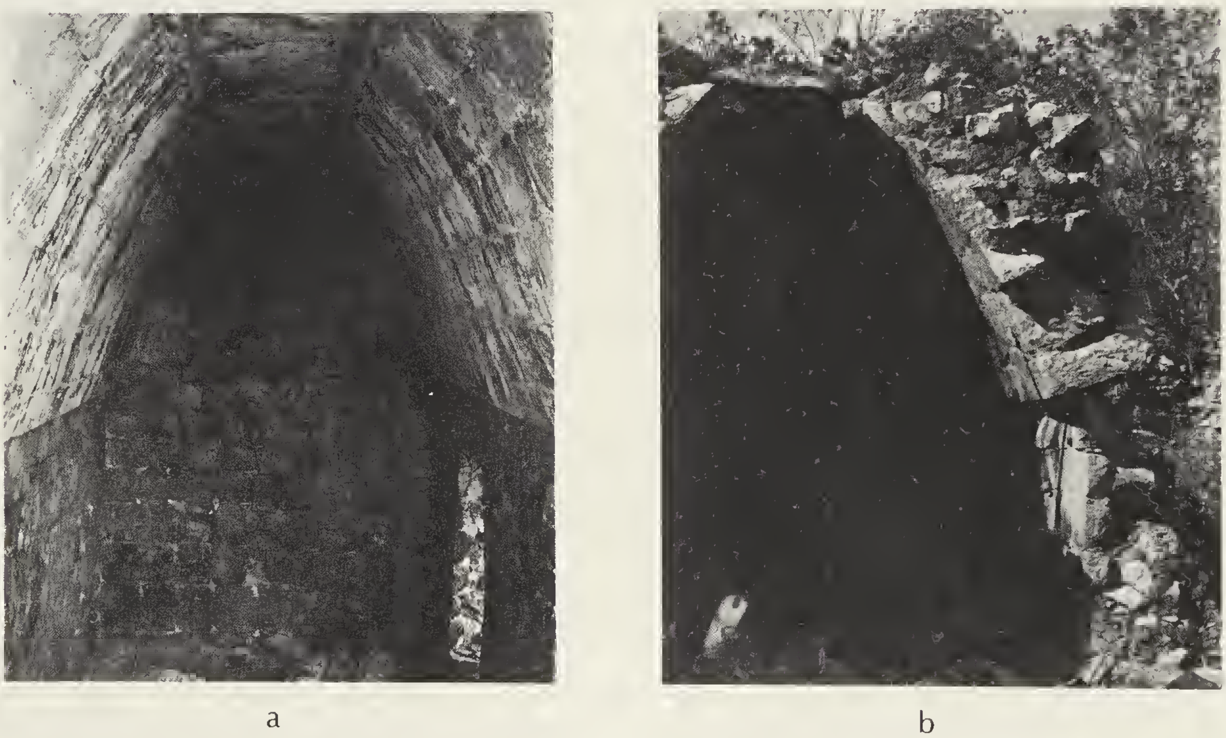


Figure 652. Xcochkax, Fourth Tier, south room: a, north end of room, looking north; b, east side of vault seen in section, looking north.

under capstones in same room. Beams in other rooms not recorded.

Moldings. Only lowest course of medial molding, which carries a slight batter (fig. 649b), remains in place.

Roof. Fair amount of final plaster roof cap preserved (fig. 649b). Roof surface about .38 m above under faces of capstones of vaults.

Decoration. Lintel over central doorway of south room carries five glyphs carved on the outer edge (figs. 650b, 653a). Central capstone of vault in same room carved with familiar plait or mat pattern (fig. 653b).

Doorway to west room of east wing carved with glyphs on front edges of jambs and a prone human (?) figure on front edge of lintel (fig. 654). Lowest carved stone of west jamb tipped forward, but nearly enough in place to be sure of its original position. Two bottom stones of east jamb in place (fig. 651c). Four fallen stones found in debris in front of doorway and two others found some distance away in front of south room but presumed to be from same doorway (fig. 655b,c). Prone figure on lintel, which had fallen inside of room, appears to be human but with ophidian features and symbols (fig. 655a).

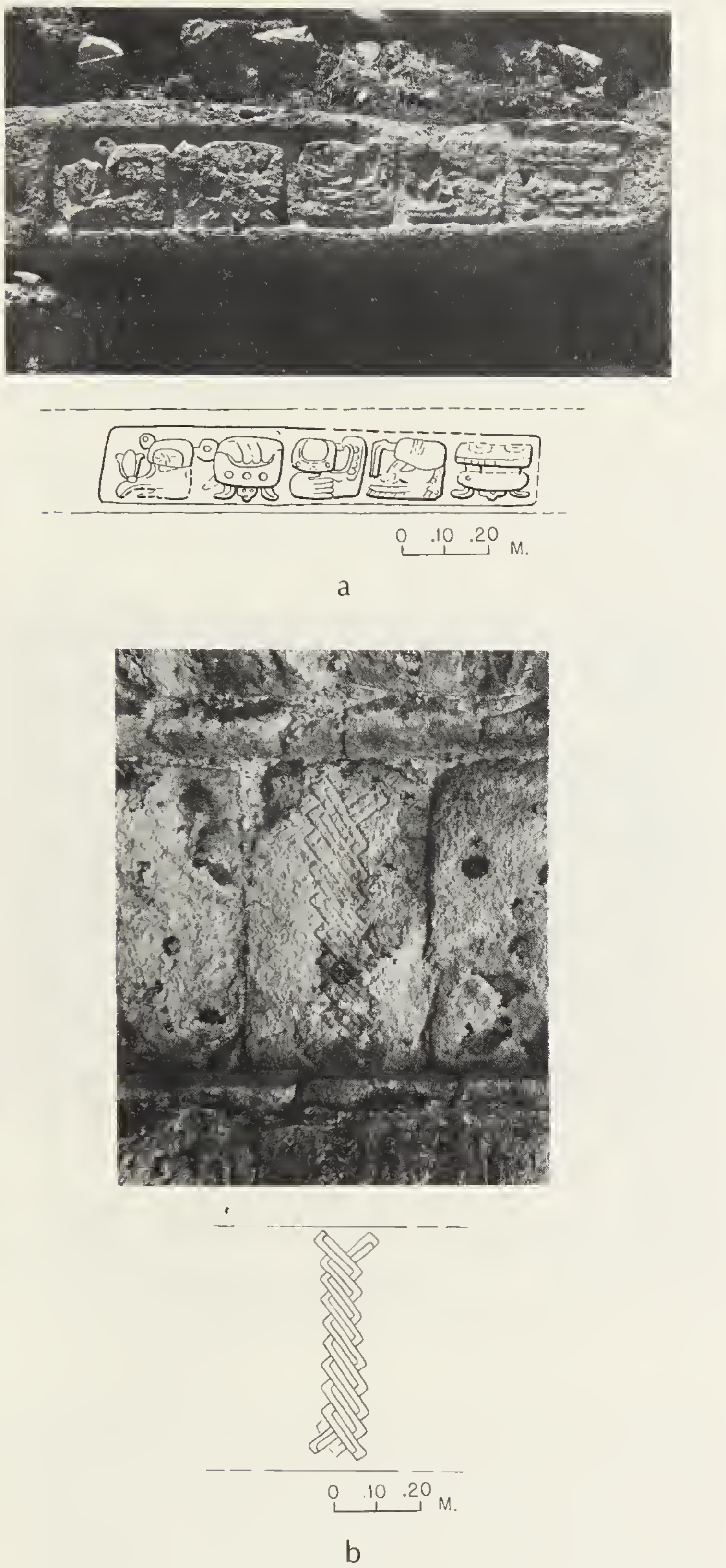


Figure 653. Xcochkax, Fourth Tier, south room: a, inscription on front edge of lintel over center doorway; b, carving on center capstone.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

The buried rear walls of this structure seem not to have been finished with the customary cut-stone facing. This indicates that the terrace behind the fourth-tier structure, which supports the fifth tier of buildings, was planned or actually erected at the time the lower structure was built.

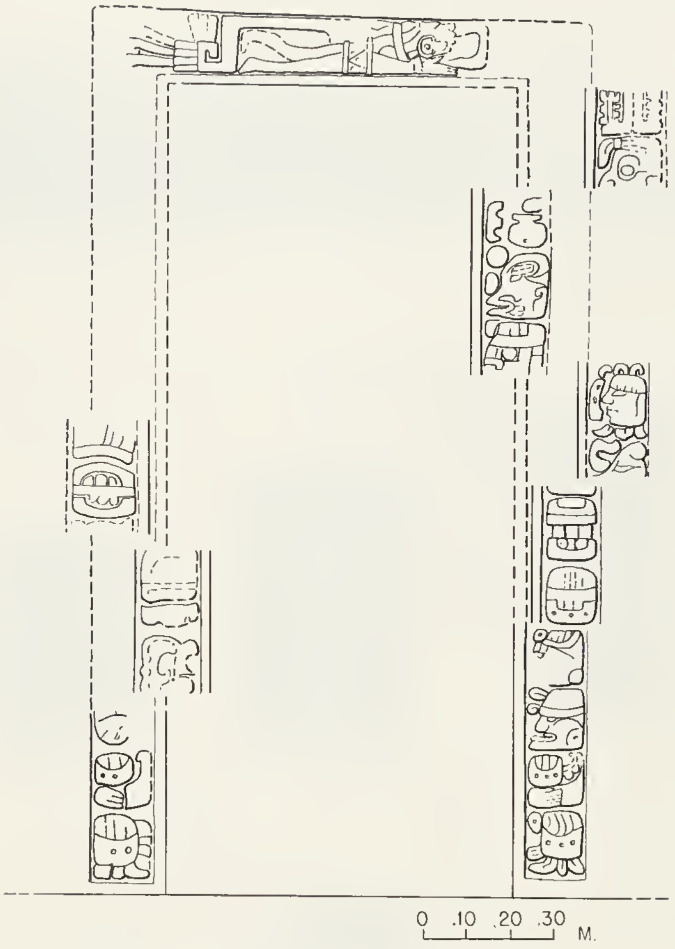
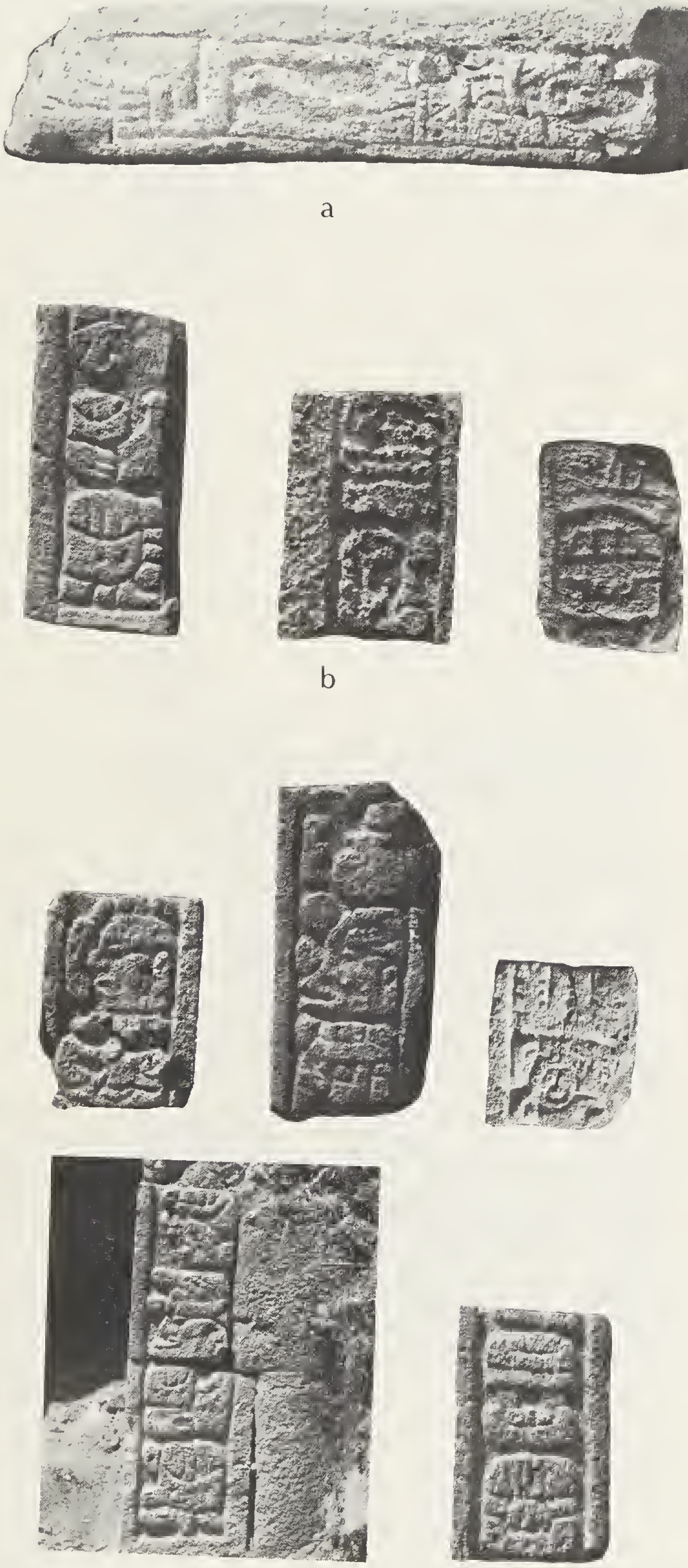


Figure 654. Xcochkax, Fourth Tier. Carving on doorway to west room of east wing. Arrangement of all but lowest jamb stones is uncertain.

Fifth Tier

As mentioned above, there is a terrace behind the fourth-tier structure that supports the fifth and final tier of buildings in the central area of the ruins. This upper terrace, which is probably partly artificial, partly formed by the natural rise of the land, carries several badly fallen buildings facing on small courtyards just north of the fourth-tier structure, and a somewhat larger building, also badly fallen, a short distance farther northeast. A sketch plan of the latter structure is shown in figure 656. Although there was no visible indication of a vaulted passage under the staircase to provide entrance to a room, one may have been present but hidden beneath debris. The plan as given here is most uncertain. It would seem to call for a second story, but there is no mention of one in my notes, nor were any other features of the structure recorded.

The fallen building or buildings, just north of and above the fourth-tier structure, is in a state of such total collapse that no plan could be made without extensive excavation. The only architectural feature that caught the eye and made the building in any way notable was a considerable amount of sculpture, mostly fallen, scattered about two doorways. The first of these, nearest the fourth-tier building below, faced east; the other, which belonged


a

b

c

Figure 655. Xcochkax, Fourth Tier. Carving on doorway to west room of east wing: a, lintel; b, stones possibly from west jamb; c, stones possibly from east jamb.

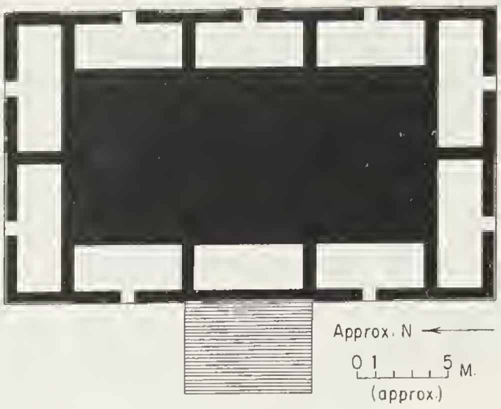


Figure 656. Xcochkax, Fifth Tier. Sketch plan of northeast building.

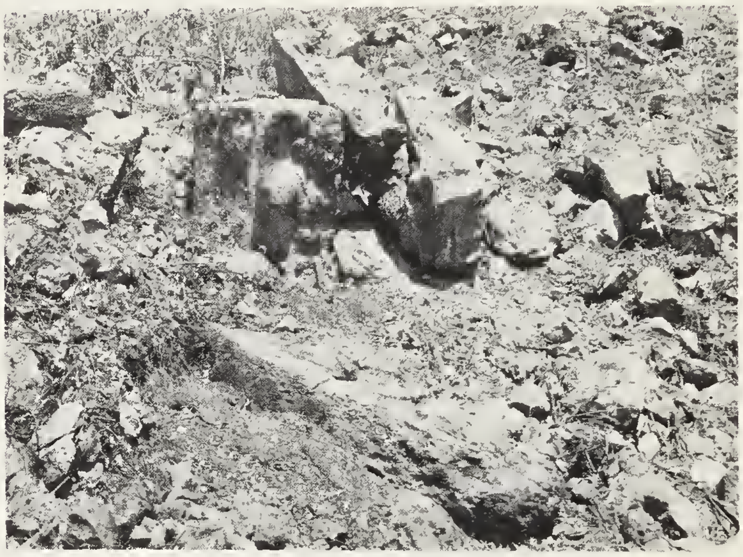


Figure 657. Xcochkax, Fifth Tier. East doorway before excavation, looking northwest, and showing sculptured column, standing half-buried at left center; north jamb stone, fallen with top toward camera, to right of column; and south jamb stone, fallen with face down, in foreground.

to what seemed to be a range of rooms that joined the first structure on the east, faced north. Both doorways were badly fallen and deeply buried, but there was somewhat less debris in the eastward-facing entrance (fig. 657) than in the northern one, and a small excavation was carried out at the eastern entrance to ascertain the character of the doorway and of the sculpture.

The single central column was still in position, but the jambs, or what I take to be jambs, were fallen (fig. 657), and no precise measurement of the width of the doorway was possible with our limited excavation. The maximum possible opening at each side of the column seemed to be 1.30 m, and 1.20 m is a reasonable guess for the width of each entrance (fig. 658). The column is rectangular in plan, .50 m wide by .40 m thick near the bottom, and tapers toward the top where it is .45 m wide. The maximum width of the northern jamb stone is .57 m (fig. 658); that

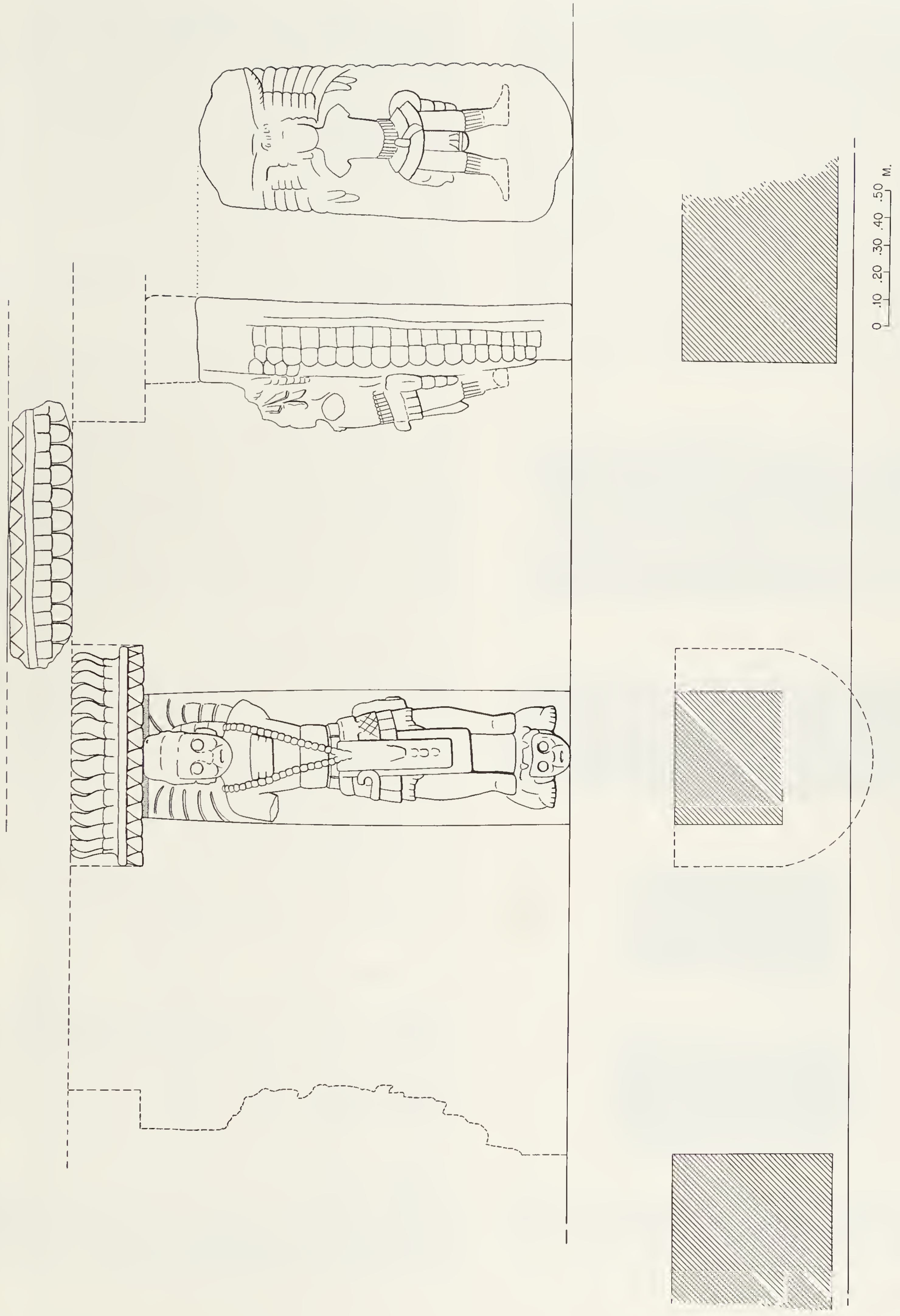


Figure 658. Xcochkax, Fifth Tier. Restored elevation and plan of east doorway. Lintel may be shown upside down.

of the similar but badly weathered southern one is .59 m. Neither sculptured jamb stone is sufficiently long to equal the height of the central column, and it would seem that in each case another stone was needed to bring the jamb to proper height. A sculptured stone .80 m long by .74 m wide by .26 m thick, squared at the back but semicircular in front, seems surely to have been the capital that once rested on the column (fig. 659a), and a fragment was found, .40 m wide by .42 m deep by .20 m thick, of what may have been a corbel from the top of a jamb (fig. 659c). A lintel carved on one edge and measuring 1.15 m long by .61 m wide by .23 m thick was found in the debris north of the columnar doorway (fig. 659b). It may have come from a different doorway, but the sculpture is the same as that on the edges of the sculptured jambs, and it is therefore shown in our restoration drawing (fig. 658).

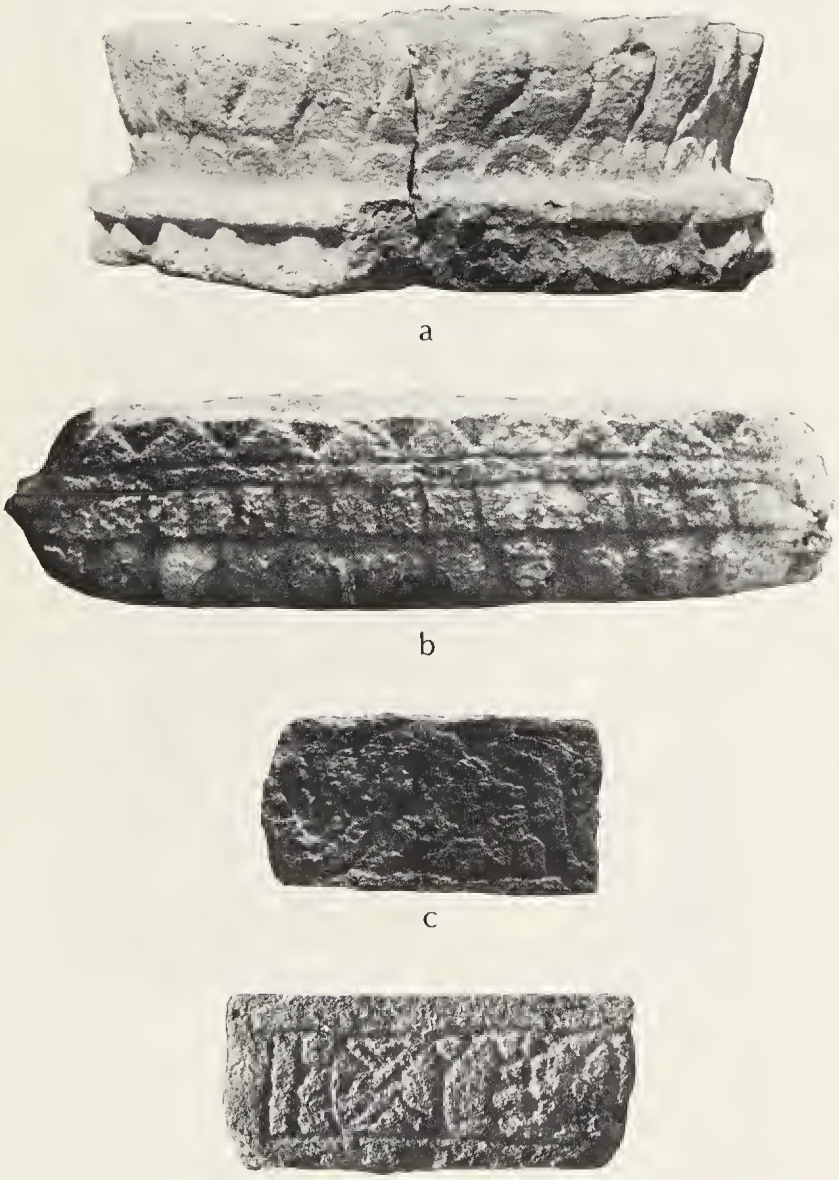


Figure 659. Xcochkax, Fifth Tier. Sculpture from east doorway: a, capital; b, lintel; c, fragment of possible corbel on jamb; d, loose piece, .46 m long by .17 m deep by .20 m high, from north of doorway.

The central column and doorjambs carry high-relief sculpture of standing human figures (see Proskouriakoff 1950, fig. 98c, d). The figure on the column stands on what appears to represent an animal, and wears a plumed headdress, represented by the capital. As mentioned above, there seems to be a stone, very possibly sculptured, missing from each jamb. The restoration drawing shows these stones above the high-relief human figures, but they may just as well, possibly more likely, have been below them. Most of the sculpture, and particularly that of the jambs, is badly weathered. See Proskouriakoff 1950 (p. 168) and 1951 (p. 115) for a discussion of the sculpture.

Immediately north of the doorway, a fragment of wall with carving on it is visible, and there are several loose pieces of sculpture lying around (fig. 659d). There is almost surely a large amount of sculpture buried here beneath debris.

As already mentioned, another doorway with considerable amounts of carved stone in association is located just northeast of the entrance described above. The second doorway, which faced north on a small court, was even more deeply buried than the first, and no excavation was undertaken. A single column with high-relief sculpture was visible and, in conjunction with what else could be seen, I gained the impression the entrance was very similar, if not identical, to the more southern example.

OUTLYING BUILDINGS

Some 100–200 m east of the first-tier structures in the central area is a partly standing building that provided a few architectural features. Across the back wall of one room is a three-membered base molding that forms a step up to the doorway leading to a rear chamber. The middle member of the molding is of colonnettes. The exterior wall facing is well cut, dressed, and finished, the interior facing more roughly executed. Doorjambs are of wall and cornerstone construction. I think, but am not certain, that the structure carried a three-member medial molding with colonnettes in the middle member.

Northwest Building

Approximately 250 m northwest or north-northwest of the buildings of the fourth and fifth-tier, described above, is a relatively well-preserved structure that faced east. I think, but my notes are not clear on the matter, that the building consists of only one room, another having been planned but never built (see below).

SUPERSTRUCTURE

Plan. Single room or range of rooms on north-south axis and facing east. Unfinished north end of building shows that further construction had been planned but never executed (see Construction, below).

Section. See figure 660.

Base Molding. Three-member molding with simple rectangular upper and lower members and recessed middle-member decorated with alternating colonnette and diamond pattern (fig. 660).

Walls. Excellently cut, faced, and fitted exterior wall stone. Interior wall facing of medium quality with notably sloppy workmanship at places. Front wall .50 m thick at doorjambs, rear wall .55 m thick.

Doorways. Full-width, well-cut jamb stones. Stone lintel.

Vaults and Beams. Rather high straight-sided vault measuring 2.5 m from spring to corbels under capstones (fig. 660). Finely cut, faced, and fitted, specialized vault stones.

Sockets for four small beams evenly spaced along length of room in corbeled courses beneath capstones. Sockets for two large beams, one at each end of room, in spring course.

Molding. First course of medial molding a heavy apron member that projects .47 m from wall surface.

Construction. Structure never completed. North end of building shows hearting of lower walls, which appear as though in section, and wall facing of interior quality between those walls and to height of where spring of vault would occur (cf. Labna, South Group, Strs. S1, 2, figs. 95, 99). Obvious that another room was to be added to north end of building. Upper facades, including upper member or members of medial molding, also never constructed. This shown by lack of debris, which normally would cover base molding, around structure. Vault with rough outside masonry face in preparation for addition of final upper-facade masonry is as far as construction went (see Sabacche, Str. 5, fig. 147a, for stages of construction in erection of a building).

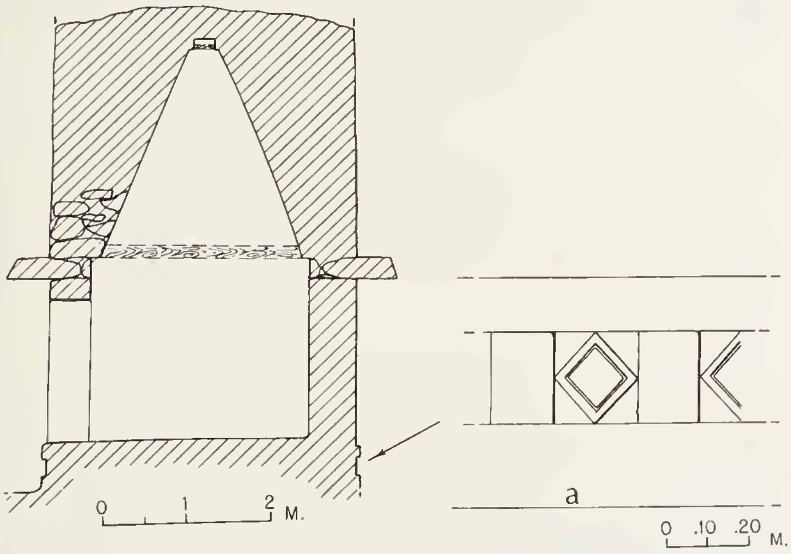


Figure 660. Xcochkax, Northwest Building, east-west section: a, detail of base molding.

MISCELLANEOUS NOTES

A number of altars, only one of which was recorded (see p. 386), were noted throughout the site. No elements of facade masks were observed anywhere.

Naox

ETYMOLOGY

Na can mean either house or mother, *ox* is the ramon or breadnut (*Brosimum alicastrum* Sw.) tree (Roys 1931, p. 272).

SITUATION

Approximately 2 km southeast of Xculoc (see fig. 624).

TOPOGRAPHY

Almost surrounded by hills, site is located in the southeast corner of a small valley that opens to the northwest. Floor of valley, where ruins lie, is flat and savannalike in character.

WATER SUPPLY

Same as Xculoc (see p. 377, above).

MAP

None but sketch map given here (fig. 661).

SIZE

Small site. Main group of half a dozen structures in area 50–60 m on a side, and an outlying building about 80 m to the south-southwest (fig. 661).

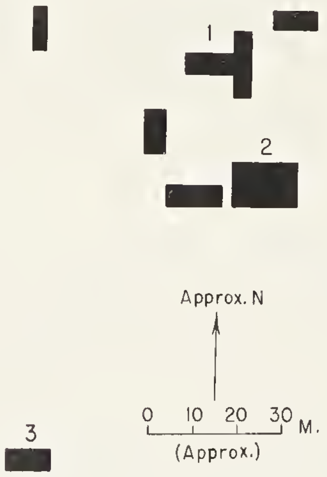


Figure 661. Naox. Sketch map of ruins.

CIVIC PLAN

Not really known, but main group seems to have had a compact and orderly arrangement of buildings.

Structure 1

Partly standing building that shows four periods of construction. Earliest building consisted of two parallel rooms with east-west axes and entrance at the south. Second building of two parallel rooms with north-south axes and entrance at the east was added to east side of first structure (fig. 662a). Third period of construction was of two rooms that faced east—one at north and one at south of second building. Lastly, two small rooms were created by vaulting over the narrow spaces between the walls of the earliest building and of the third period of construction.

SUPERSTRUCTURE

Plan. See fig. 662a.
Sections. See fig. 662b,c.

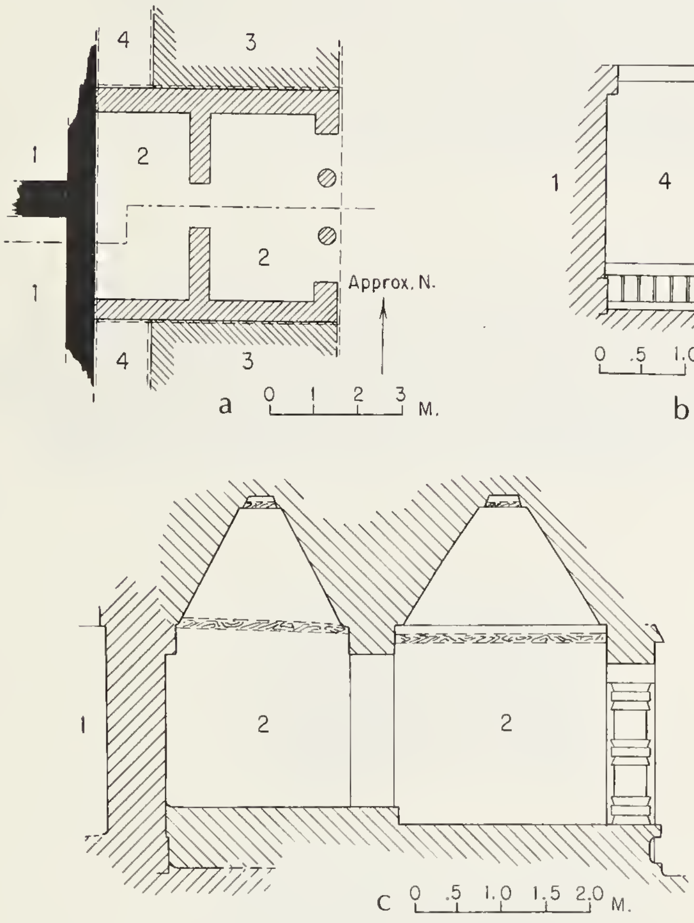


Figure 662. Naox, Structure 1: a, plan of eastern part of building, showing periods of construction (numbered from earliest to latest); b, west-east section through southern rooms, showing base molding and wall of Period 2 in elevation; c, west-east section through Periods 1 and 2.

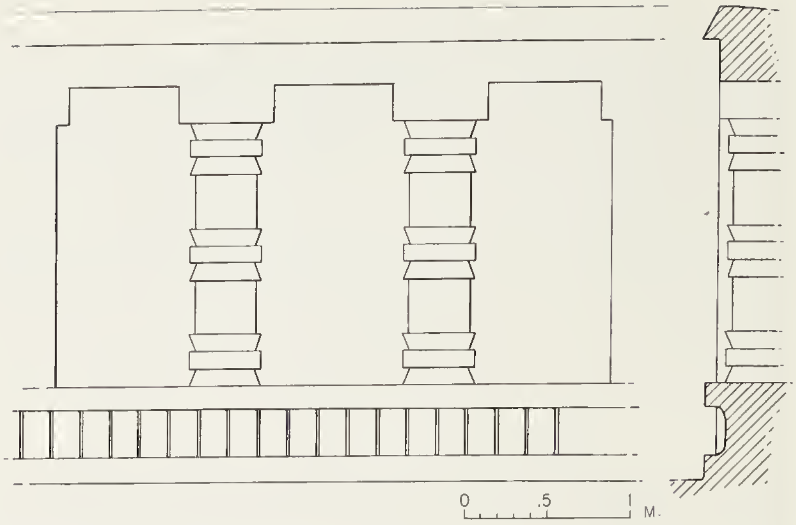


Figure 663. Naox, Structure 1. Restored elevation and section of entrance to Period 2 building.

Base Moldings. Earliest building carried simple rectangular base molding of single course of dressed stone .40 m high, the lowest .05 m covered by floor outside of the building (fig. 662c). Three-member base molding with middle member formed of colonnettes on second- and third-period constructions (figs. 662b, 663).

Walls. Medial wall of first building .78 m thick; outer walls about .65 m. Walls of second building .50–.55 m thick. No measure of third-period walls.

All wall masonry is well cut, faced, and fitted. Best masonry is that of earliest building.

Doorways. Entrance of first building employs two columns that are strongly flattened on sides (cf. fig. 664a). Measure .70 m across by .63 m thick. Full-width jamb stones.

Doorway columns of second-period structure are banded (figs. 662c, 663). Spools are .43 m in diameter, column drums .37 m (cf. Xcochkax, First Tier, North Range, p. 388). Columns supported capitals, and jambs carried corbels. Jambs of outer doorway of full-width stones, of inner doorway of two vertical courses of cornerstones.

Moldings. Single heavy rectangular member .31 m high are all that remains of medial molding of early building (fig. 662b,c). Only lowest member of medial molding preserved on second and third constructions, in each case an apron; that on the later building carries a more pronounced batter and is slightly heavier. No cornice molding remains in place or visible.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Sequence of construction outlined above and shown in figure 662. Not known if upper facade of each preceding building was removed prior to erecting next building—a customary procedure—but probably done. Vaults of small fourth-period chambers sprang from lowest member of medial molding on first- and third-period buildings.

Structure 2

May have been most important building at site. Very few architectural details discernible without excavation, but obvious there were several stages of building. On east side is high, apparently solid, pyramidal mass of masonry, which may have supported, or been intended to support, a temple superstructure. Adjoining pyramidal structure on its west side, and secondary to it, are some rooms with high, straight-sided vaults similar to those in the Northwest Building at Xcochkax (see above). Architectural details noted were flat-sided doorway columns (fig. 664a) measuring .61 m across by .58 m thick, and a molding stone with a dentate design found in the debris (fig. 664b).

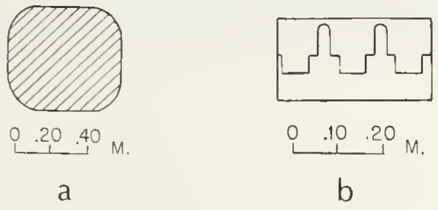


Figure 664. Naox, Structure 2: a, section of doorway column; b, detail of carved molding stone.

Structure 3

Building faces north where stairway rises to upper story that rests approximately on level of medial molding of lateral transverse rooms of first story (cf. Sayil, Str. 2B5, p. 105). Low vaulted passage under stairway (fig. 665a).

Upper story carries unusual, heavy three-member base molding (fig. 665b). Wall masonry of finely cut, faced, and fitted stone. Columnar entrance, which faces north toward stairway, has two rather small columns which measure .35 m in diameter at top and swell to .38 m halfway down, owing to exaggerated entasis. Well-cut, full-width jamb stones. Only lowest course of medial molding—an apron member—still standing.

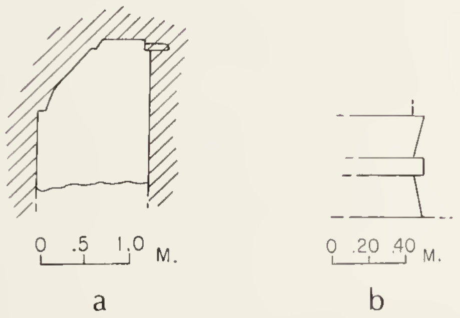


Figure 665. Naox, Structure 3: a, north-south section through passage under stairway; b, detail of base molding on upper story.

MISCELLANEOUS NOTES

Several altars were observed but not recorded. No elements of facade masks were seen.

Chunhuhub

ETYMOLOGY

Maler (1902, p. 210) defines the name as place of the huhub tree, a definition concurred in by Roys (1935, pp. 9–10). The *huhub* is *Pinus caribaea* Morelet (Roys 1931, p. 246) or the Cuban pine, an unlikely tree to find in the environment of Chunhuhub. Variant spelling: Chunhuhu, Chunjuju. Other names: Xculhok, Xunantunich.

SITUATION

Some 5 km southeast of Xculoc, 3 km southeast of Naox, and about 6 km east of Almuchil.

TOPOGRAPHY

Ruins lie on, and at edge of, savanna of Chunhuhub, from which the site takes its name. Number of buildings located on rocky outcrops and on relatively high hills.

WATER SUPPLY

Same as at Xculoc (see p. 377, above).

SIZE

Site not thoroughly explored and size not well known. Maler (n.d., p. 8) noted ruined structures in all directions from the central palace group, and also observed an extensive area of small ruins, which was at that time under freshly cut milpa, east of the palaces (Maler 1902, p. 212). He also describes other buildings to the west and three hilltop groups at distances of one and two kilometers from the central ruins. One cannot be certain that these more distant remains are properly a part of Chunhuhub, but it seems probable that careful exploration in the central areas would uncover sufficient remains to mark a fairly large site.

CIVIC PLAN

Not known. Maler (1902, p. 212) seems to feel that eastern part of city was residential in character. Outlying groups appear to favor hilltop locations, but nothing is known of intervening areas.

REFERENCES

Maler 1902, pp. 210–213.
Maler n.d., pp. 4–9.
Ruz 1945, pp. 42–44, 79.
Stephens 1843, 2:130–133.

MAIN OR PALACE GROUP

Two best preserved buildings at site are part of a considerable group of badly fallen structures arranged about courts and supported by extensive artificial terraces. The Main Palace and the Adjacent Palace, some 5 or 10 m south of it, face west on an open terrace. Behind these buildings to the east is a raised court that was probably approached from the west by a stairway between the two buildings. There are structures at the north and east of the court (Maler 1902, pp. 210–211) and still farther east is a lower court with buildings on all four sides. The structure between these courts, i.e., on the east side of the first court and west side of the second, supported a second story that was approached from the east by a stairway that rose over a vaulted passage. The badly fallen building showed moderately well-dressed and fitted wall stone, semispecialized vault stone, and a heavy rectangular medial molding.

Several column altars and chultuns were observed in the Main Group but were not recorded.

Main Palace
(Palace of the Figures)

This building rests against the substructural terracing that forms the raised court behind the building.

SUPERSTRUCTURE

Plan. Six rooms, four of which are in line on a north-south axis and are entered from the west, a transverse room at north end of building entered from adjoining north

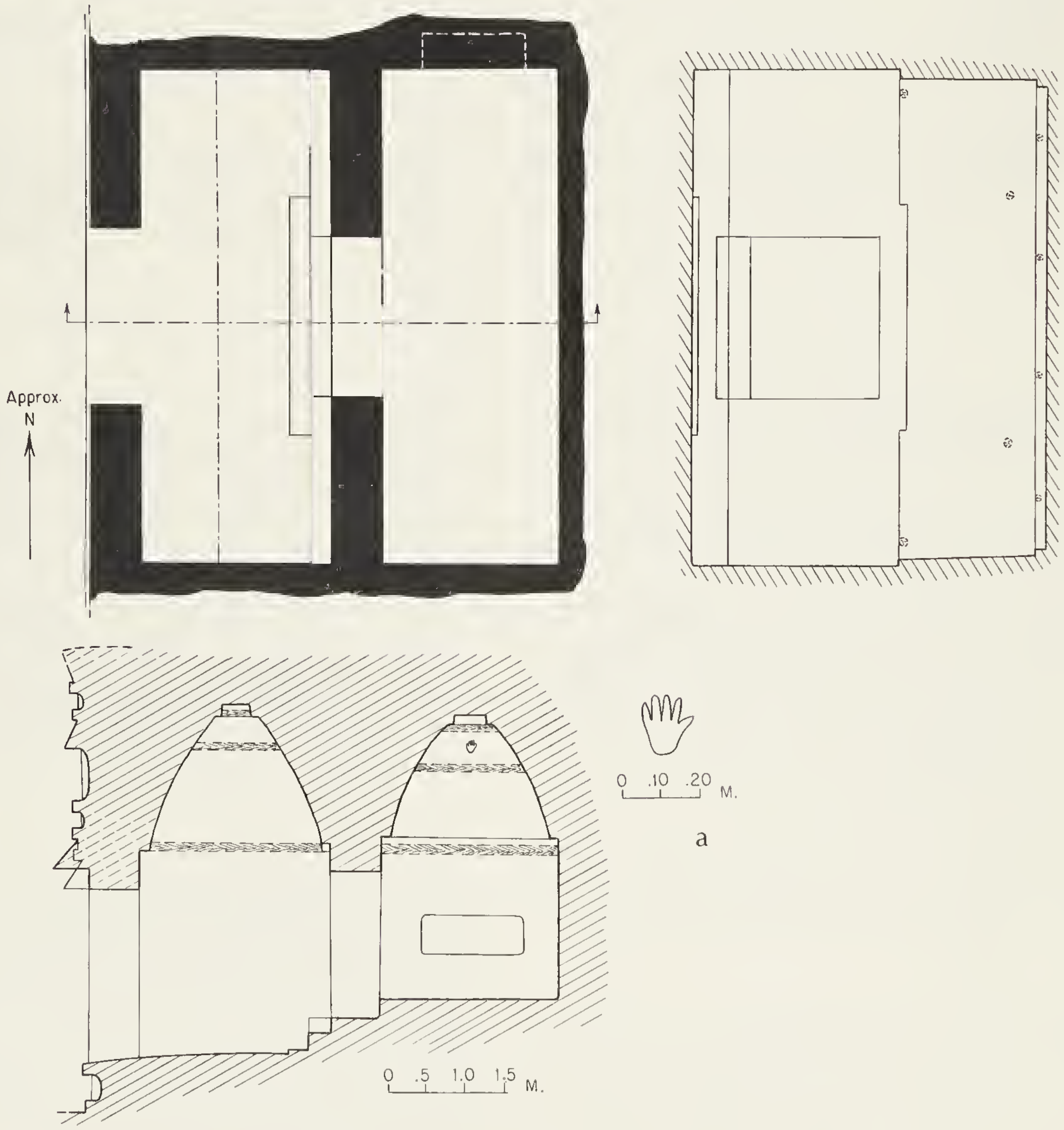


Figure 666. Chunhuhub, Main Palace. Plan and sections of central rooms: a, cordholder in form of hand or foot.

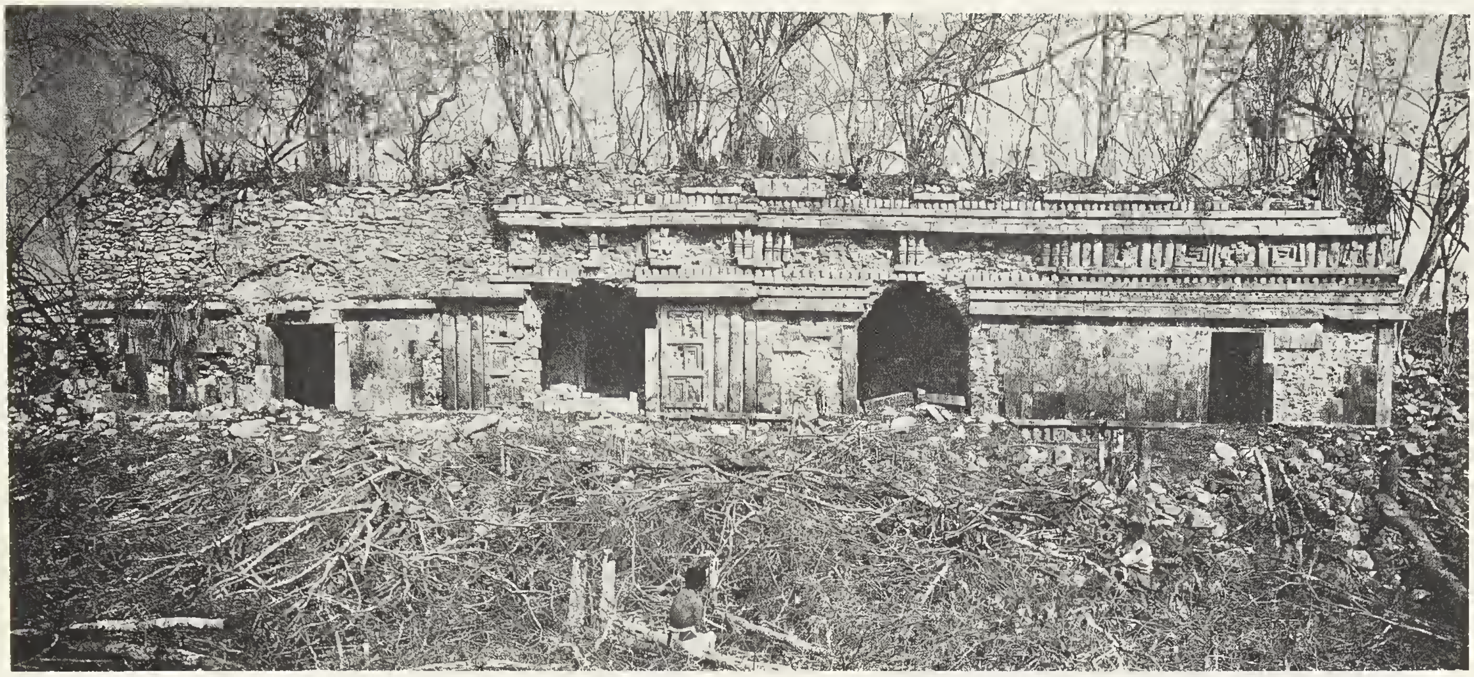


Figure 667. Chunhuhub, Main Palace. View from west (Maler photo).

longitudinal room, and an inner room behind, and entered from, third room from south (fig. 666) which is centrally located in respect to main west facade. This plan differs from that described by Maler (1902, p. 211). Stephens (1843, 2:130) says the building is 112 feet (34.14 m) long; Maler (1902, p. 211) estimates the length to be 35.22 m.

At least four badly fallen rooms several meters behind (east) and at higher level than above-described range that might be thought of as second story or as separate building.

Sections. See figure 666.

Elevation. See figures 667, 670. Drawing shows some restoration.

Base Molding. Three-member molding of rectangular string courses separated by high middle member of triple colonnettes alternating with step-and-fret designs (figs. 666, 670).

Stairways. Flight of four steps leads to central inner room (figs. 666, 668). Three steps lead to north transverse room. As mentioned above, probably was stairway between Palace of the Figures and Adjacent Palace that led to higher range of rooms just to the east.

Floor. Usual buff color. Three successive floors noted.

Walls. Measure .56 m thick at doorjambs. Outer facing of large, finely cut, shaped, and fitted stone. Top quality masonry. Inner facing stone rather large but of normal quality. Break in construction at level of medial molding and one course below spring of vault. Course below spring level slightly recessed from inner wall faces, a common practice in Puuc building.

Doorways. Finely cut, large, full-width jamb stones and large stone lintels. Central inner doorway 2.05 m wide (fig. 668) and outer doorway, one jamb of which has fallen, was probably slightly wider.

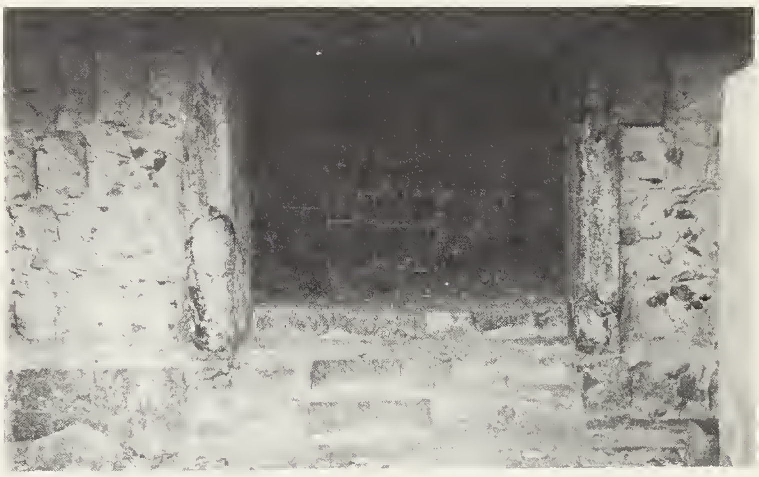


Figure 668. Chunhuhub, Main Palace. View of stairway and entrance to inner central room, looking east.

Wall Depressions and Projections. Large niche 1.25 m long by .55 m high in south end wall of second room from south, and a similar niche in north end of central inner room (fig. 666). Common cordholders in inner wall surfaces in sets of three at each side of doorways. Rod sockets in doorjambs.

Projecting cordholders in frequently observed form of foot, or possibly of hand (fig. 666a), at north and south ends of central inner vault.

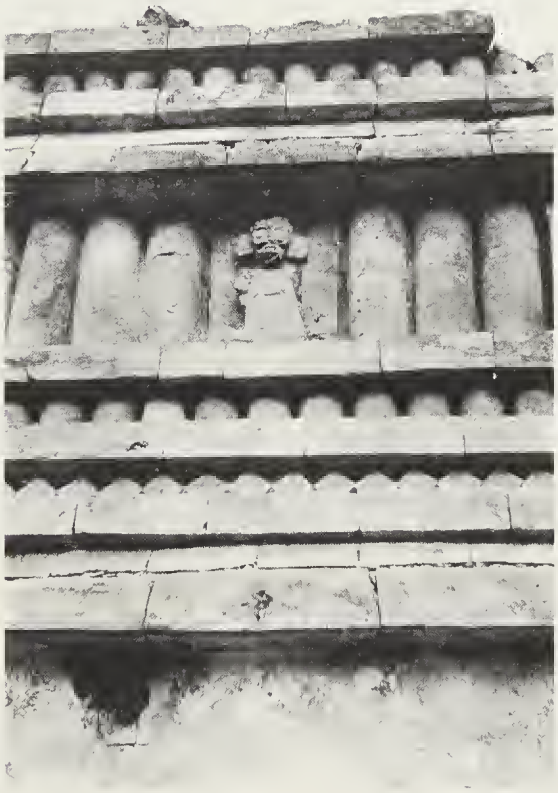
Bench. Remains of bench at east end of north transverse room.

Vaults and Beams. Finely cut, shaped, and fitted, large, specialized (boot shaped) vault stone. Usual offset at level of spring on all sides of room and small offset or corbels beneath capstones.

Two beams occurred at level of vault spring, two at three-quarter height of vault, and up to five in small offset course beneath capstones (fig. 666). Rear center room once had two pairs of beams, one course below spring of vault, two beams at two-thirds height of vault, and three just below offset under capstones.

Moldings. Rare six-member medial molding and five-member cornice molding (figs. 666, 667, 669a, 670). Medial molding rises over central doorway where second and third members are omitted (figs. 667, 670). Lowest member of medial molding over central doorway is slightly heavier and projects farther than lowest member at each side (fig. 666).

Decoration. Step-and-fret designs with row of colonettes above and below, and flanked by three facade columns at each side of centrally located doorway (figs. 667, 669b, 670). Executed in finely cut stone. Upper zone of facade, which is contracted owing to heavy moldings, carried frets, banded split columns, plain split columns, and high-relief—almost full round—anthropomorphic figures in stone (fig. 667). Five such figures in place at time of Stephens's visit (1842) and four in Maler's time (1887). At


a

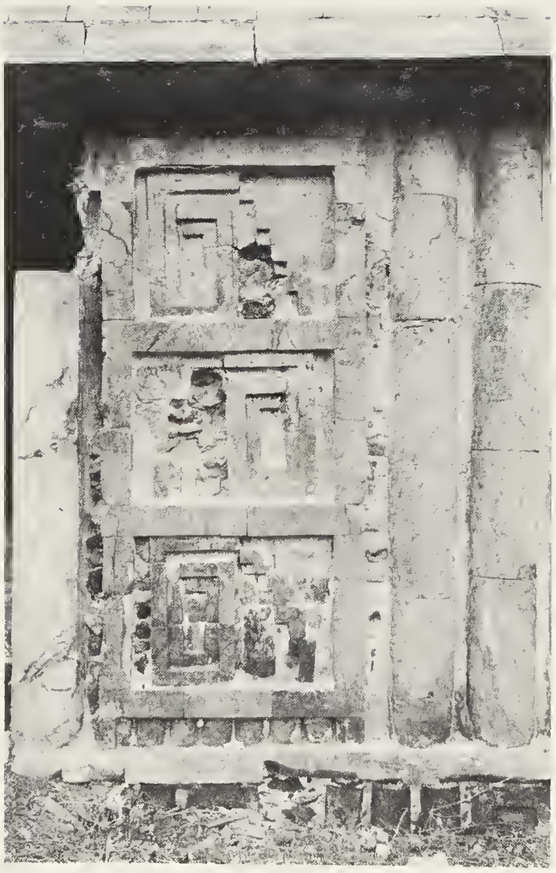

b

Figure 669. Chunhuhub, Main Palace: a, view of moldings, frieze, and only remaining anthropomorphic figure on west facade; b, geometric decoration at south side of main doorway (see fig. 670).

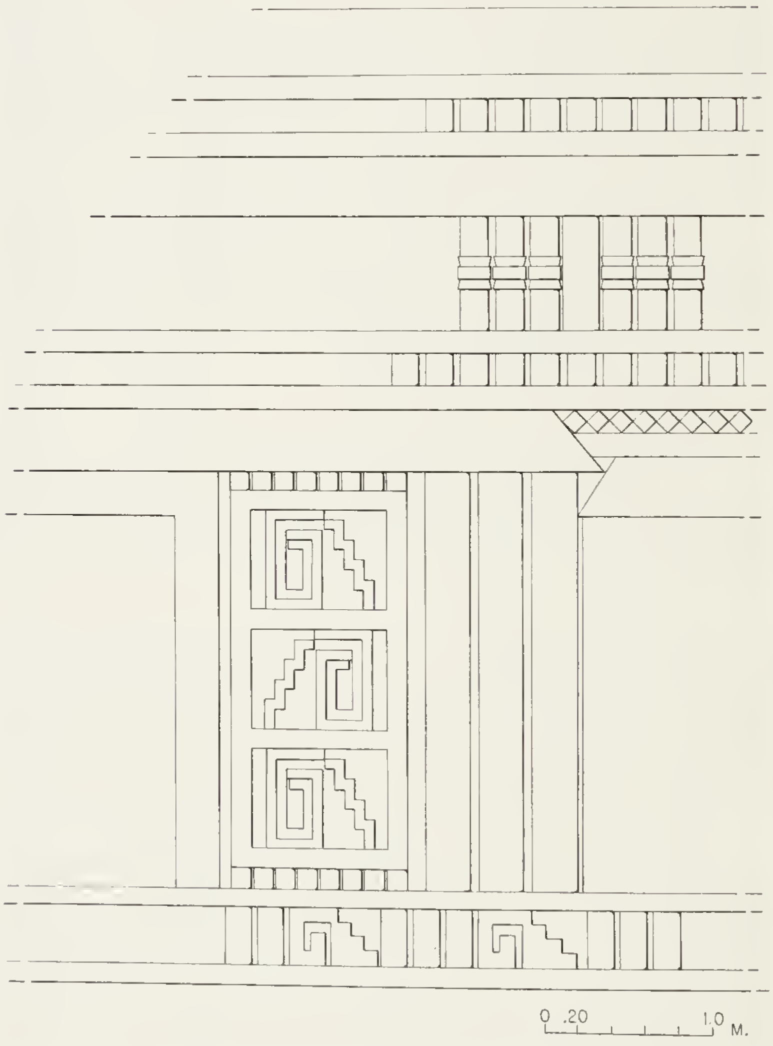


Figure 670. Chunhuhub, Main Palace. Detail of decoration at center of main facade.

time of my visit (1936) only one figure in place (fig. 669a) and badly broken batlike figure (cf. Pavon 1942, p. 47) lying in center room. This is probably the left-hand figure shown in the Stephens (1843, 2:131) illustration. Three of four figures seen in Maler photograph (fig. 667) were on wall of principal building in Xculoc village in 1936. These have since been moved to the Archaeological, Ethnographic, and Historical Museum in Campeche. (See Pavon 1942, pp. 45, 47, 48, where figures are illustrated and attributed to Xunantunich; and Ruz 1945, p. 43, for discussion of sculpture.)

At north end of northern longitudinal room there is three-member molding above lintel over doorway to transverse room and apron member below capstone. Somewhat reminiscent of stucco decoration around doorway to Room 5 in Structure 2A2 at Kabah (see p. 168).

UPPER RANGE

Badly fallen structure on higher level and several meters behind (east) Main Palace. Probably approached by stairway between Main Palace and Adjacent Palace. No plan made of Upper Range, but at least four rooms once existed. Remains of doorway at south.

Construction. Exterior wall masonry of large, finely cut, faced, and fitted stone (fig. 671). Interior masonry of roughly cut, faced, and fitted stone with spalls between stones. Full-width stones for doorjambs. Southern doorway employed banded columns like those in second period of Structure 1 at Naox (see fig. 663, above). Well-cut and fairly well-fitted specialized vault stone (fig. 671b). Medial molding a heavy apron member, topped by small rectangular string course (fig. 671). Only lowest member of cornice molding standing. This presumably topped by usual outward leaning coping course.

Decoration. Upper facade or frieze of banded colonnettes (fig. 671). This area considerably more constricted than normal owing to heavy medial molding.

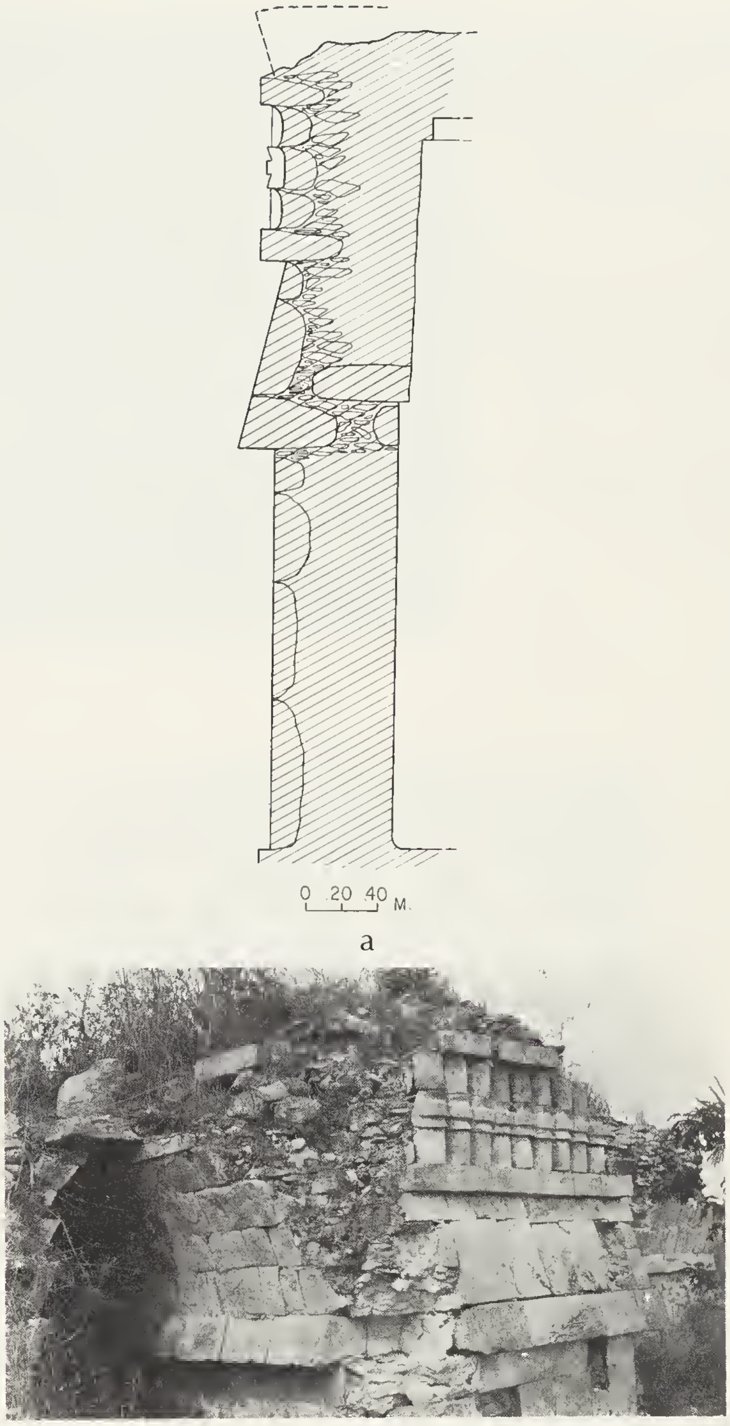
Raised capstone at center of one vault giving effect of sunken panel. Capstone probably once painted (cf. Kiuic, Group 1, Str. 4, p. 357, above) but no trace of paint remains. Maler (1902, pp. 211–212) noted traces of red paint on the facade of the building and observed red and green bands around the beam holes in vaults and walls.

Adjacent Palace

Located 7 or 8 m south of the Main Palace this structure also rests against the terrace that forms a raised court behind (east) both buildings.

SUPERSTRUCTURE

Plan. Three rooms in line on north-south axis face west. Stephens (1843, 2:132) reports the length of the building as 85 feet (25.91 m); Maler (1902, p. 212) gives 19.12 m.



a

b

Figure 671. Chunhuhub, Main Palace, Upper Range: a, section of facade and end of room; b, view showing vault in section and detail of upper facade.

Elevation. See figure 672 (and ibid., fig. 11).

Base Molding. Maler (ibid., p. 212) says this molding is made of four members, the lowest being a plain course of stone. My notes show a floor running outward from the building at the bottom of what is Maler's second member (figs. 673, 674). It is quite possible there is indeed a lower plain member and that the floor I observed is of secondary nature.

Floor. Three or four thin layers at center doorway. These are surface coats of plaster rather than new floors. Color varies from light to dark buff, the latter possibly a red.

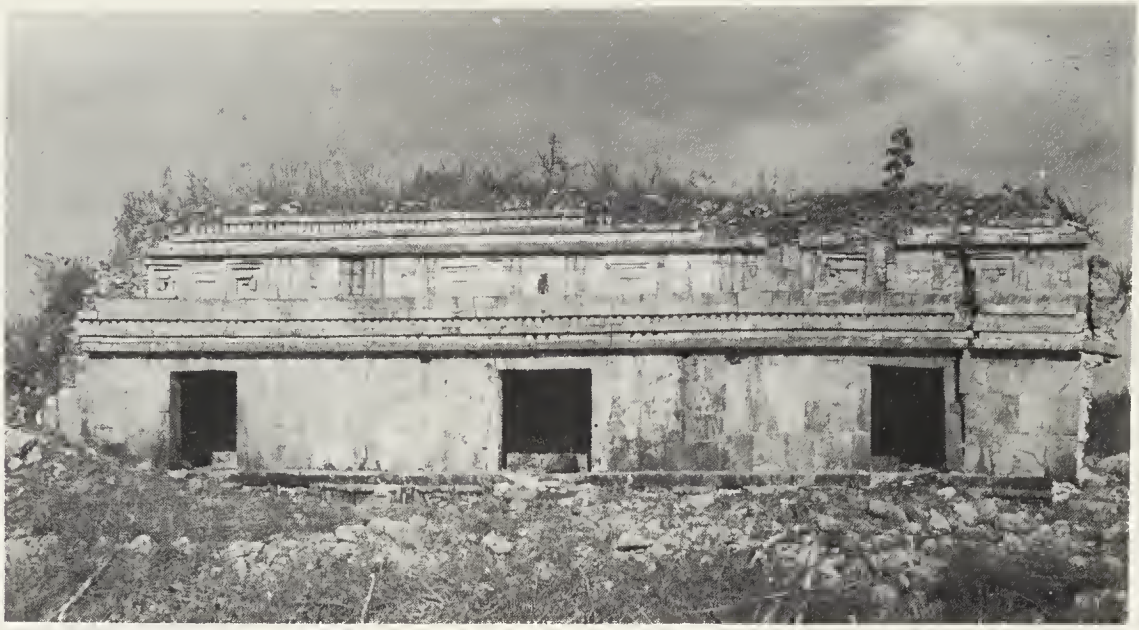


Figure 672. Chunhuhub, Adjacent Palace. View from west.

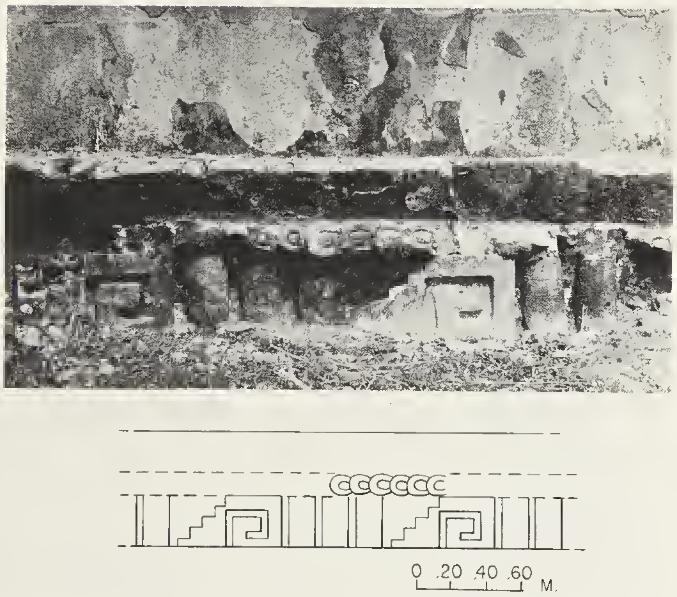


Figure 673. Chunhuhub, Adjacent Palace. Detail of base molding.

Color seems to fade and originally probably a dark buff or red.

Walls. Measure .64 m thick at doorjambs. Outer facing of finely cut, shaped, and fitted stone that runs up to .60 by .75 m in size. Stephens (1843, 2:132) says whole facade was covered with plaster. Inner wall facing of rather large stone but of average quality. Usual break in construction at level of medial molding, one course below spring of vault. This course below spring is slightly recessed.

Doorways. Finely cut, large full-width jamb stones and large stone lintels. Center doorway 1.72 m wide. No narrowing of doorways at top.

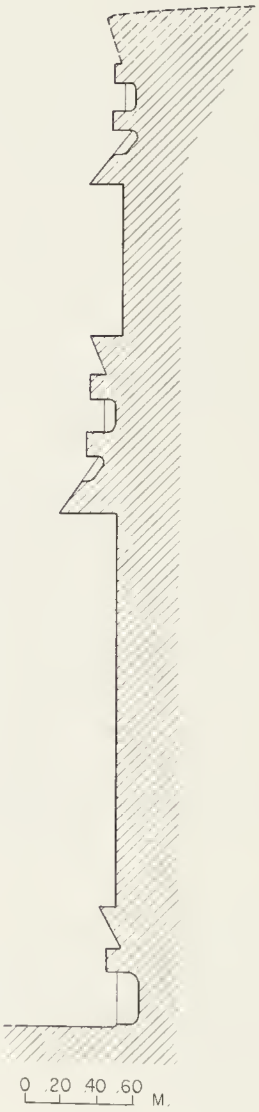


Figure 674. Chunhuhub, Adjacent Palace. Facade section.

Wall Depressions and Projections. Shallow rectangular niche just below level of spring of vault at end of north room. Projecting square tenon at other end of room. Cordholders of one-tongue type, both side and corner-of-stone variety, at sides of doorways, and rod sockets in doorjambs.

Vaults and Beams. Finely made vaults of thoroughly specialized boot-shaped stone. Two beams once below spring of vault, three below small offset course under capstones.

Moldings. Five-member medial and cornice moldings (fig. 674) like cornice of Main Palace (fig. 670), but for groups of three colonnettes in second course of bottom apron member. On medial molding groups of colonnettes only at center of facade, on cornice molding spaced all across facade (fig. 672; and see Maler 1902, fig. 11).

Decoration. Frieze on upper facade made of finely cut and dressed stone. Fret-and-step arrangements flanked by banded split columns. Also groups of four banded columns flanked by panels with projecting tenons. Design over northern doorway unusual in employing colonnettes laid horizontally. Terribly weathered remains of small human figure over central doorway. Judging from tenons still in place, there once were eight such figures in frieze.

TEMPLE GROUP

Maler (1902, p. 212) writes: "A short distance to the west of the architectural center formed by the Main Palace lies a large pyramid of ruins, numbering, I think, three structures, which were once the main temple. Only a few portions of the terrace walls and stories of this edifice are left."

The brief description suggests to me an acropolis-like complex.

OUTLYING HILLTOP GROUPS

Maler (1902, pp. 212–213; n.d., pp. 8–9) describes three hilltop groups at distances of 1 to 2 km from the Main Group at Chunhuhub. He calls these the First, Second, and Third Castillos.

First Castillo

This group lies a kilometer or more northwest of the Main Group and south of the road to Xculoc. It is on top of a very steep hill, and consists of two buildings on an artificial platform. The walls of the platform are well preserved at the northwest corner where two terraces, each about 1.5 m high and with a batter of about .30 m, are built of large, roughly shaped, but well fitted stones that give no sign of having been laid in mortar.

A building of one long room with two doorways that face south is located at the north side of the platform. The three-member base molding with colonnettes in the middle member (fig. 675) is visible at places. The wall masonry is of well-cut, faced, and fitted stone, and the doorjambs are made of full-width, well-cut stone. No other details were noted of this badly fallen structure.

A two-room building stands on the west side of the platform and faces east toward the central ruins of Chunhuhub. The masonry of the structure, which is partly standing, is of slightly less well-cut, faced, and fitted stone than that of the north building.

Chultuns were observed in the court formed by the two buildings, as was a finely cut, tapering column altar.

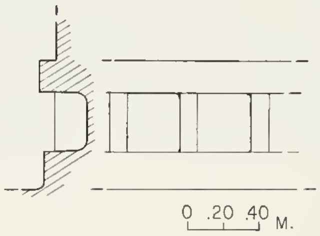


Figure 675. Chunhuhub, First Castillo. Detail of base molding.

Second Castillo

This building, or group of buildings, is about 1 km north-northwest of the Main Group and close by the north side of the road to Xculoc. Maler (1902, p. 212; n.d., p. 8) observes that the steep rocky hill on which the structure rests was elaborately terraced on its south side, from which side the buildings apparently were approached.

Maler (ibid.) describes the structure on top the hill as "a temple-palace of two stories." The second story, he says, is demolished, but some portions of the lower story are preserved. The stairway leading to the second story is on the south side, and below it is a passage spanned by a half-vault that leads to a well-preserved room whose entrance has a single column at the center. The room rests against the solid core under the second story.

Third Castillo

A kilometer north of the Second Castillo and approximately 2 km from the center of Chunhuhub is still another hilltop group of ruins that in Maler's time (1887) was known to the local Indians as Xpostan, which Maler (1902, p. 212; n.d., p. 8) translates as strewn with ashes or in the midst of the ashes. The group on top of the hill is described as a court with buildings on all four sides. All of the facades

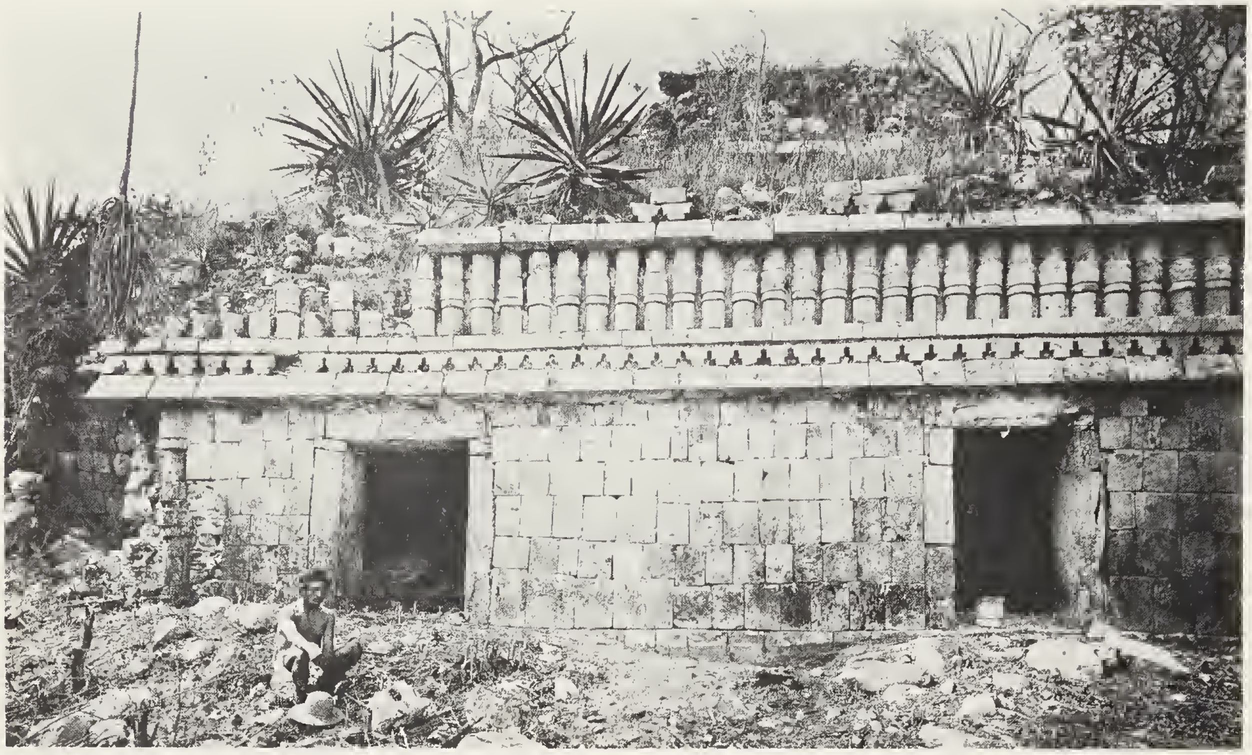


Figure 676. Chunhuhub, Third Castillo, Lower north range. View from north.

facing the court were fallen, but two large doorway columns in the debris of the eastern structure showed that its central room had had a triple entrance, and a single banded doorway column was found in the debris of the south facade of the northern structure. The column is similar to those in the Upper Range of the Main Palace (see above) and in Structure 1 at Naox (see fig. 663). Two large chultuns, or cisterns, were observed in the courtyard.

Behind the northern building, at a slightly lower level and facing north, was a range of three rooms about 17.5 m long (Maler 1902, pp. 212–213; n.d., p. 9). The relatively well-preserved facade (fig. 676) showed a simple base molding made of a single course of well-cut stone that projected .08 m from the wall surface above. The walls were faced with well-cut, faced, and fitted stone, and the three doorways, one for each room, were built with well-cut, full-width jamb stones and well-cut stone lintels. The medial molding was of three members, an apron course, a row of inverted stepped pyramids, and a small rectangular member—an arrangement repeated in the cornice molding with the addition of the usual outward-leaning coping course. Ornamentation consisted of banded facade columns, probably three in number, at each front corner of the building, and banded colonnettes in the upper zone of the facade (fig. 676).

Almuchil

ETYMOLOGY

Maler (1902, p. 213) gives: *almuchil* = place of the young toads.

SITUATION

Approximately 5 km south-southwest of Xculoc, 6 km west of Chunhuhub, and 18 km east of Xcalumkin.

TOPOGRAPHY

Ruins located in southwest section of flat area of land that is half savanna, half wooded. Site surrounded by good-sized hills opening toward the northeast. Majority of structures placed on low limestone outcroppings in otherwise flat land, but some building on surrounding hilltops.

WATER SUPPLY

Same as at Xculoc (see p. 377, above). Very large rock basin (sarteneja) some 250–300 m west of what seemed to be approximate southwest limits (Str. 6) of central area of city. Water hole circled by rough stone wall that may be ancient.

SIZE

Not well known owing to lack of exploration. Maler (1902, p. 213) reports, "no vast edifices, but we found here remains of about 20 of moderate size," an observation that is in accord with our own. What appears to be center of site lies in an area about 250–300 m on a side, comparable in size to Xculoc, but probably less densely built up. Some outlying hilltop buildings were seen from a distance and there may well be more of this kind of construction than we noticed.

CIVIC PLAN

No map of site and no real knowledge of civic plan. Usual disposition of buildings around courts and plazas, but my impression was of a good deal less compact arrangement than at Xculoc. Structures in level central area favor low rock outcrops as building sites, whereas outlying groups seem to be on hilltops as is true of other ruins in this region.

Orientation. Compass sights on two buildings show axes 13° east of north, magnetic, and on a third building 11° east of north, magnetic. These readings are approximately 20°15′ and 18°15′ east of true north.

REFERENCES

Maler 1902, pp. 213–215.
Ruz 1945, pp. 45–46, 79.

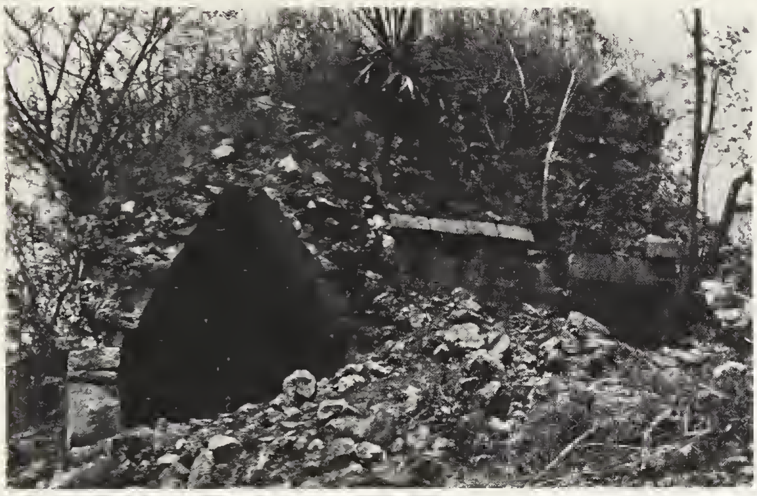


Figure 677. Almuchil, Structure 1. View from south-southwest, showing vault of south room in west wing in section, and molding and large lintel over doorway to south room of east wing.

CENTRAL AREA

As mentioned above, the central area of Almuchil, or at least the part of it we explored, measures some 250–300 m north and south and roughly the same distance east and west. Near the northern limits of the area two buildings that I am calling Structures 1 and 2 lie a short distance apart, Structure 1 to the west of Structure 2. To the southeast of these buildings, maybe 200 m, and near the eastern limits of the area, is Structure 3, or what Maler called the Ball Palace. South-southwest of Structures 1 and 2 and west-southwest of Structure 3, possibly 250–300 m in each case, and near the southwest corner of the area, are Structures 4, 5, and 6. These are, of course, only the buildings that offered sufficient architectural detail to be worth recording. Numerous other mounds and structures in varying degree of collapse lie about the site.

Structure 1

Partly standing building (fig. 677) consists of a range of rooms on north-south axis, and facing west to the rear (east) of which was added a double range of rooms on east-west axis and facing south.

SUPERSTRUCTURE

Construction. Floor level rises from front to rear room in east wing (fig. 678). Front (south) wall of east wing .53 m thick at doorjambs, medial wall only .38 m thick at doorjambs and exceptional in lightness and in being thinner than front wall. Outer wall facing of well-cut, faced, and fitted stone. Inner wall facing normal in west wing, but rear wall of inner chamber in east wing shows sloppy stone work. Full-width jamb stones and stone lintels in all doorways (fig. 677). Bench at west end of front room in east wing carries on its face three-member molding with pairs

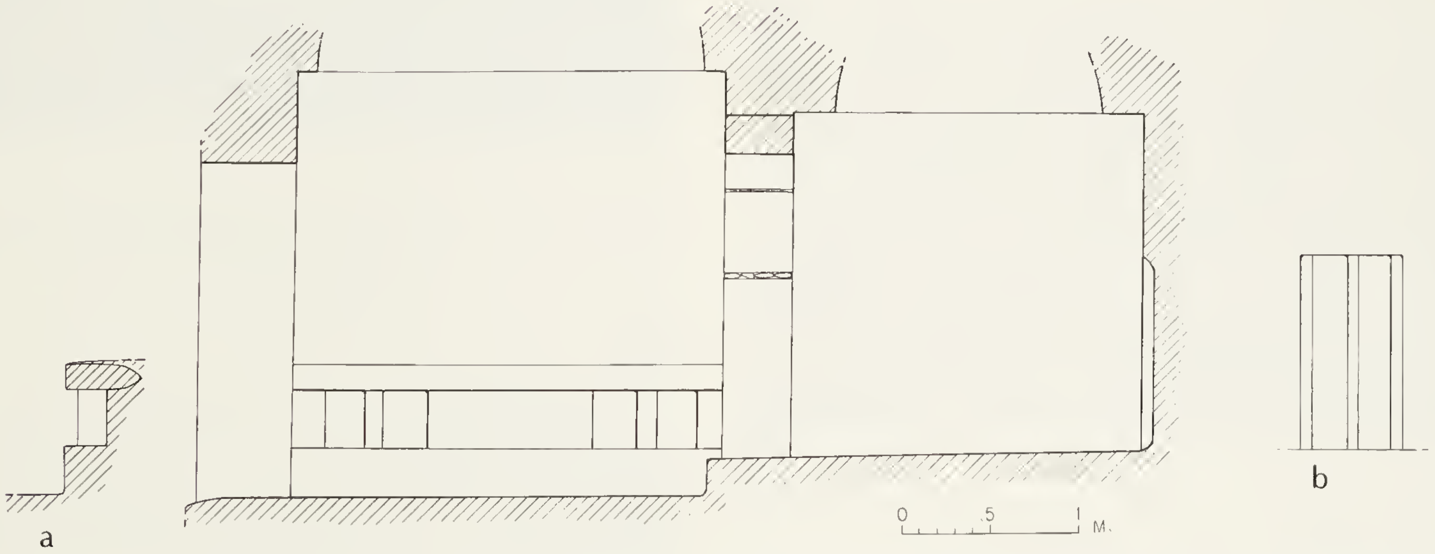


Figure 678. Almuchil, Structure 1. Transverse section through east wing: a, section through face of bench in front room; b, detail of panel of split columns in rear wall of rear room.

of colonnettes separated by sunken panel in middle member (fig. 678). Vaulting not recorded but in photographs (figs. 677, 679) appears to be of well-shaped and fitted semispecialized stone. Spring of vault in inner room of east wing at level one course lower than spring in front room (fig. 678). Only first course of medial molding—an apron member—remains standing (fig. 677).

Decoration. Besides molding on front of bench (see above), pair of split columns forms panel in rear (north) wall of inner room of east wing (fig. 678), an unusual, if not unique, arrangement.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

East wing an addition to earlier west wing but little remains visible in style or construction that differentiates the two.

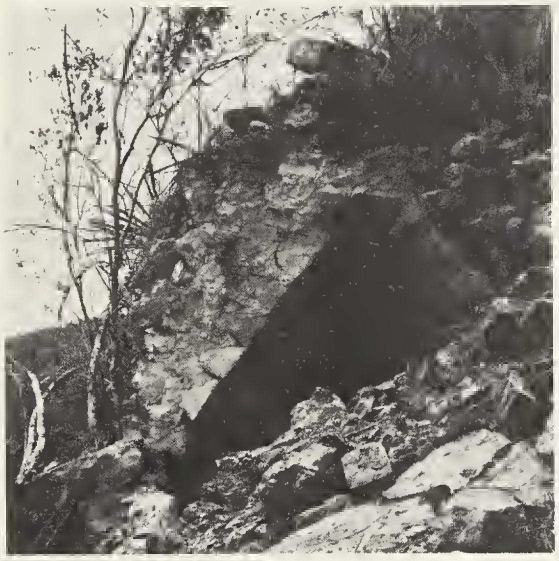


Figure 679. Almuchil, Structure 1. South room of east wing, looking west, and showing vault in section.

?

Structure 2

Considerably destroyed building short distance east of Structure 1. Five phases of construction discernible. Early building of two rooms (Rooms 1,2) in line on east-west axis and facing south (fig. 680). Other early building about 5 m to the east completely demolished in ancient times except for west end wall which formed east end wall of southern of two rooms (Rooms 3, 4) added to east end of early two-room building. Secondary walls in east room (Room 2) of early building divided that space into three rooms. Further construction at north of that building, and finally a second story, neither of which are indicated on plan (fig. 680).

SUPERSTRUCTURE

Plan. See figure 680. Incomplete.

Sections. See figure 681. Partly restored and incomplete.

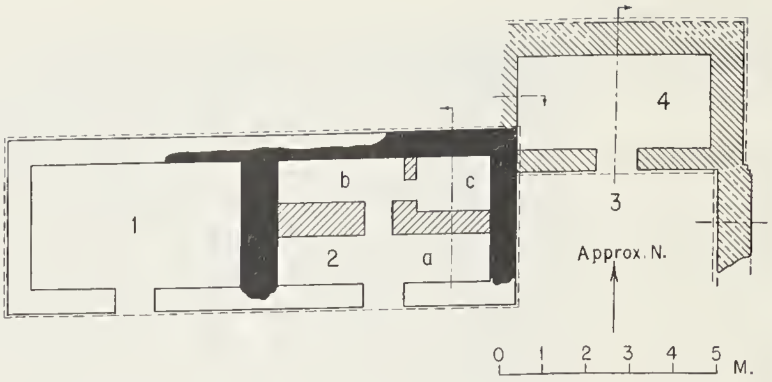


Figure 680. Almuchil. Plan of part of Structure 2.

Base Molding. Probably simple course of faced stone, but not certain.

Floor. Level rises from Room 3 to Room 4 (figs. 680, 681b).

Walls. Rear and east end walls of Room 2 are .60 m thick; west end wall .85 m thick. Secondary longitudinal walls in Room 2 (fig. 680) are .80 m and .55 m thick, secondary cross wall .26 m thick. Rear and east walls of Room 4 are .75 m thick, medial wall between Rooms 3 and 4 is .50 m thick, and east wall of Room 3 (old exterior wall) is .78 m thick.

Outer wall facing of all phases uses moderately well-cut, faced, and fitted stone. Same is true of inner wall facing of Rooms 3 and 4 (fig. 682). Inner facing of original Room 2 of poorly-cut, faced, and fitted stone with considerable chinking between stones. Secondary interior walls in Room 2 built of moderately to well-cut, faced, and fitted stone.

Finished plastered building level at top of walls immediately below medial molding.

Doorways. Seem to have been stone lintels over all doorways. Jambs of south doorways to Rooms 1 and 2 probably made of wall and cornerstones, but this not certain. Interior doorways in Room 2 of same variety of construction. Doorway of Room 4, and presumably of Room 3, employed full-width jamb stones (fig. 682).

Wall Depressions and Projections. Several niches or cupboardlike depressions in walls. Elaborate niche with L-shaped plan in wall just south of doorway to Room 2c (figs. 681a, 683a). Other niche just below level of spring of vault in east end wall of same room. Made by removing wall stone and plastering sides of resulting niche. Similar niche in east end wall of Room 3 (fig. 683b) but at half height of level of spring.

A cordholder of two holes was observed in Room 2c above and left of the doorway (fig. 681a). Another cordholder of rare form made by hole cut through stone in spring course of vault occurs over doorway in Room 4 (fig. 681b).

Several cordholders of ring variety. Two on south wall of Room 2c near top of wall and near corners of room (fig.

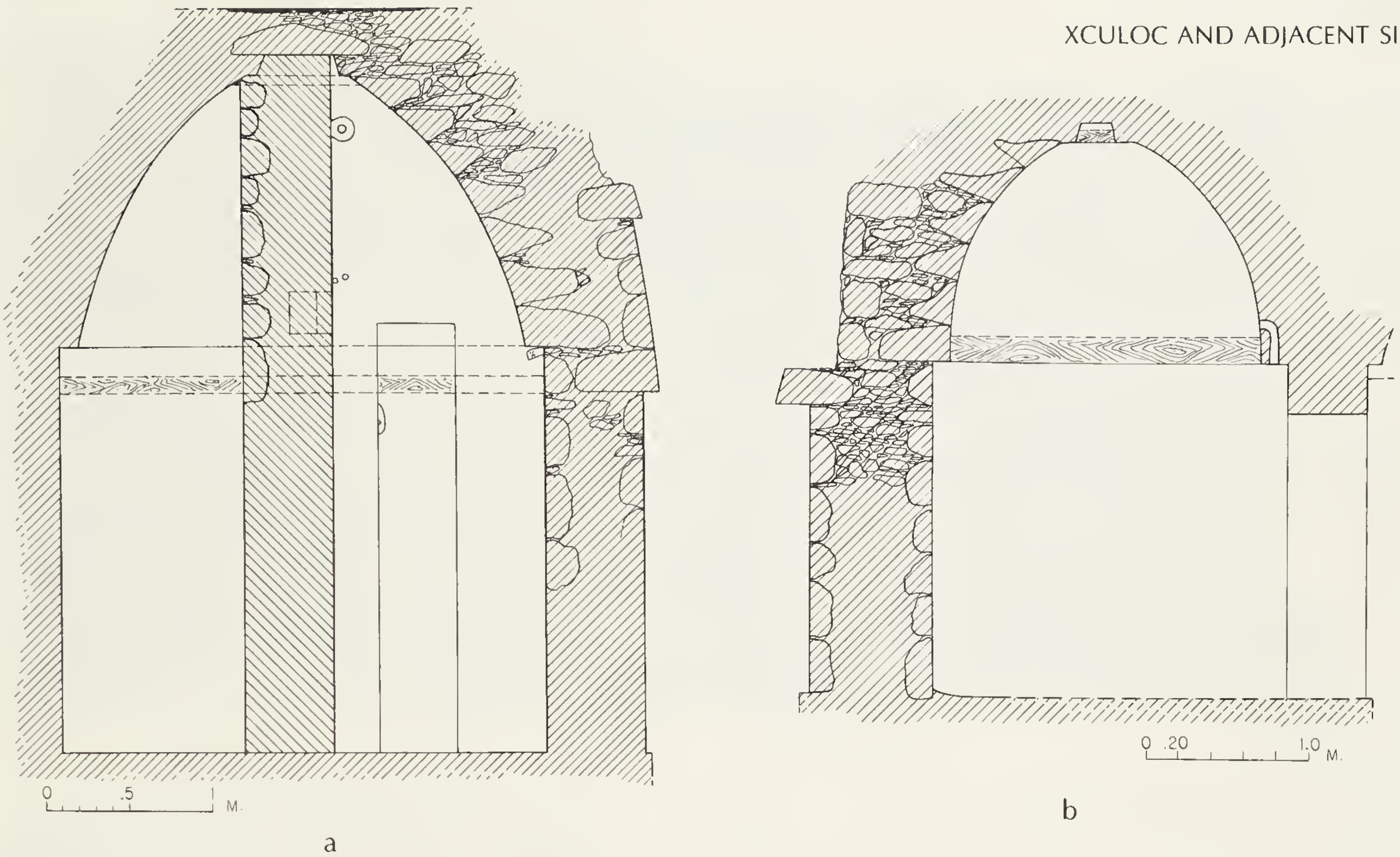


Figure 681. Almuchil, Structure 2: a, section through Rooms 2a and 2c; b, transverse section through Room 4.

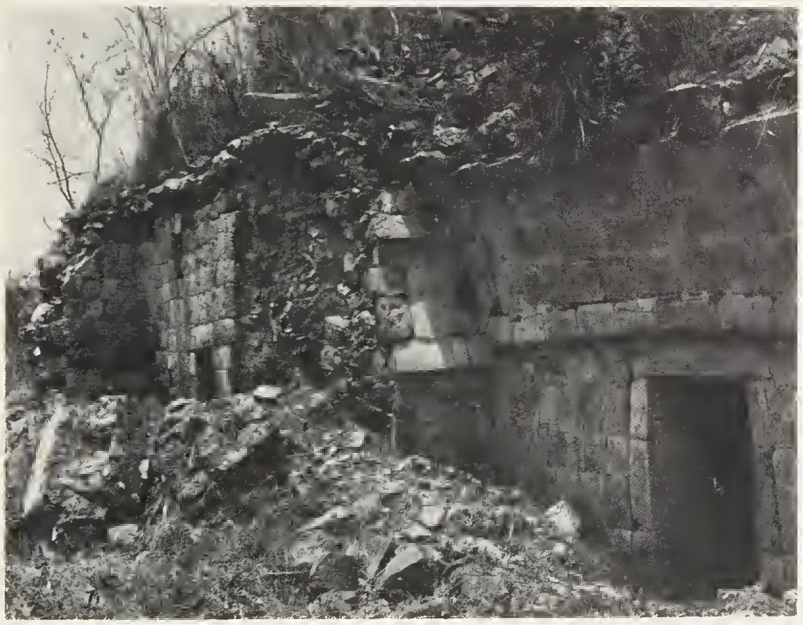


Figure 682. Almuchil, Structure 2. View from southeast, showing rear wall of Room 3 with doorway to Room 4 and (in distance) rear wall of Room 2a.

681a). Another on west end of vault of Room 4 (fig. 683c). Perforated stone that in effect is ring cordholder built into south jamb of doorway to Room 2c (fig. 681a) and similar perforated stone below spring on north side of same room.

Vaults and Beams. Vaulting of Rooms 1 and 2 made of moderately well-cut, faced, and fitted, semispecialized stone (fig. 681a). Vault masonry of Rooms 3 and 4 of better quality (fig. 682) and stone more highly specialized in shape (fig. 681b). Typical rough face of vault masonry behind Room 4 was later covered by facade masonry, which has fallen.

Beams in Rooms 1 and 2 probably one course below spring of vault and one at each end of room. Three small beams just below corbels under capstones (fig. 681a). Room 4 once had three beams in spring course at west end (fig. 683c) and one at east end. Three small beams in offset course (corbels) below capstones in Room 4 (fig. 681b).

Moldings. Early building (Rooms 1, 2) carried heavy overhanging apron member that rose to about half height of upper facade and was topped by small apron course (fig. 681a). Masonry above this taken down in ancient times (but cf. Bobil, West Building, early phase, fig. 639a, above; Chunhuhub, Main Palace, Upper Range, fig. 671, above).

Apron member representing first course of old medial molding on early wall at east end of Room 3 (fig. 683b). Wall rebuilt anciently above that point.

Lowest course of medial molding, an apron member, in position behind (north) Room 4 (fig. 681b). Masonry above that point fallen.

Roof. Fragment of roof remains above Room 2 (fig. 681a). Typical construction of small stone and mortar topped by finished plaster surface, but roof cap exceptionally thin (i.e., from underside capstone to upper surface of roof).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

As mentioned earlier, earliest construction is the once-separate western building comprising Rooms 1, 2 and the eastern end wall of Room 3. It is impossible to tell which is the earlier without excavation. The interior subdividing walls in Room 2 are secondary to the early western building and Rooms 3 and 4 are secondary to that building and to the slightly out-of-line eastern end wall of Room 3 (fig. 680). Again, one cannot say which of the secondary constructions came first. The structure north of the early western building, not shown on the plan, seems to have been built subsequently to Room 4 and thus is tertiary to Rooms 1 and 2. The second story, also not shown on the plan, appears to be the latest construction of all, i.e., quaternary in relation to the early western building.

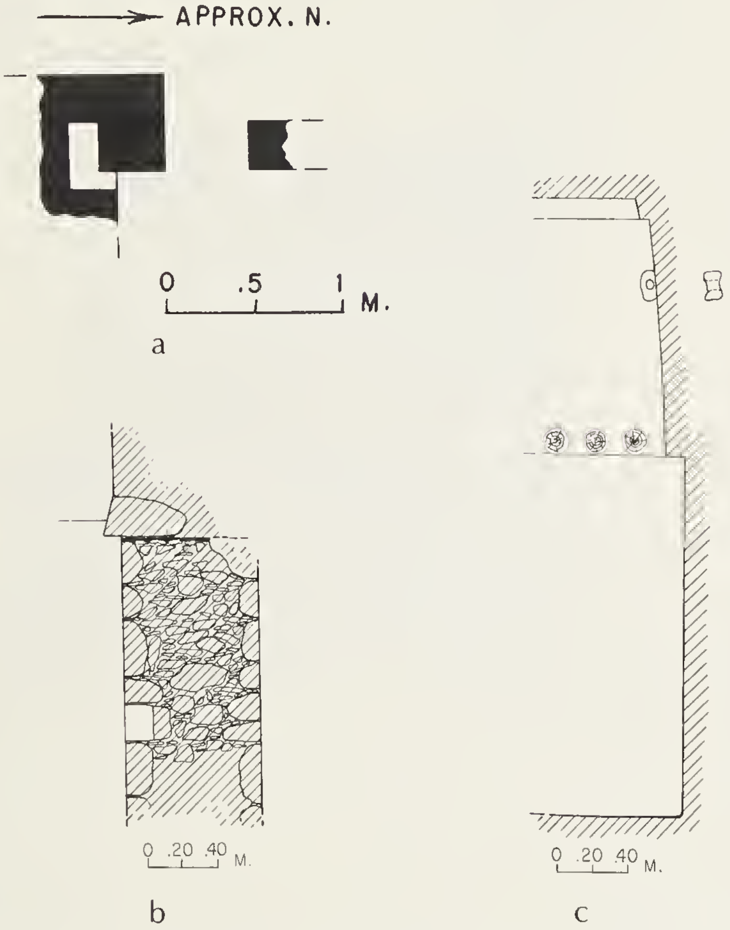


Figure 683. Almuchil, Structure 2: a, plan of niche in wall between Rooms 2a and 2c (see fig. 681a); b, section through east wall of Room 3; c, section through west wall of Room 4.

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Structure 3
(Ball Palace)

Possibly 200 m east-southeast or southeast of Structures 1 and 2, and near the eastern limits of the central area, is the best preserved building at Almuchil. It was described and photographed by Maler (1902, pp. 213–214; and see Marquina 1951, photo 343, which is printed in reverse) as the Ball Palace. The structure, which consisted of two stories, the upper one completely fallen, faced west on a court or plaza where Altar 1 (see Monuments, below) rested. Of the four lower-story rooms, three are in relatively good state of repair, while the southern transverse room (fig. 684) is a heap of debris. Behind (east) these lower rooms are the remains of a solid platform which supported the second story, and Maler (1902) says a stairway rose on that side. These features are not shown on our plan.

SUPERSTRUCTURE
(fig. 685)

Plan. See figure 684. Incomplete.

Section. See figure 686a.

Elevation. See figures 685, 687. Incomplete and partly restored.

Base Molding. Simple course of nicely dressed stone .38–.40 m high (.32 m showing above floor) projecting .06–.07 m from wall (figs. 686a, 687, 688a).

Floor. Typical smooth plaster floor preserved in patches outside base molding and in rooms.

Walls. Front wall only .50 m thick at doorjambs. End walls .60–.70 m and interior transverse walls .80 m thick.

Exterior wall masonry of finely cut, faced, and fitted stone (fig. 685). Interior walls of noticeably less well-cut, faced, and fitted stone, the masonry in Rooms 1 and 2 being cruder than that in Room 3 (fig. 688b).

Doorways. Full-width jamb stones and well-cut stone lintels.

Wall Depressions. Hemispheroid rod sockets about .05 m in diameter and .02 m deep in doorjambs (fig. 688a). Common small-hole cordholders in pairs on each side of doorway on inner wall faces, but precise type not recorded.

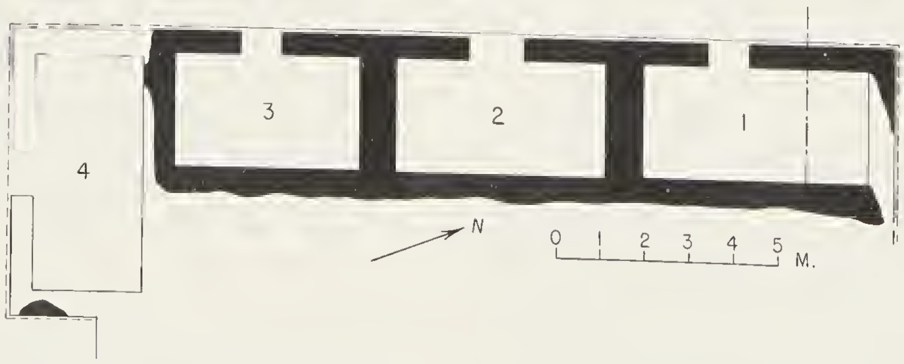


Figure 684. Almuchil, Structure 3. Plan of lower story at west.

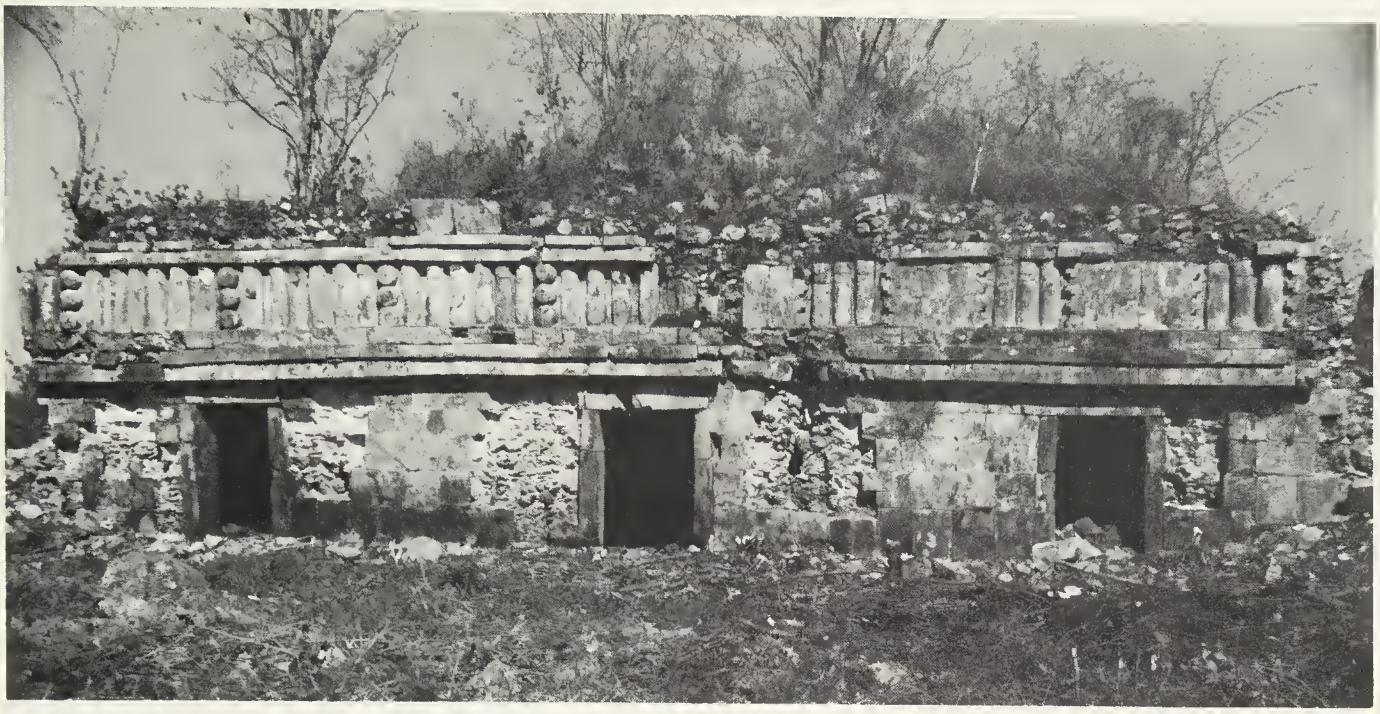
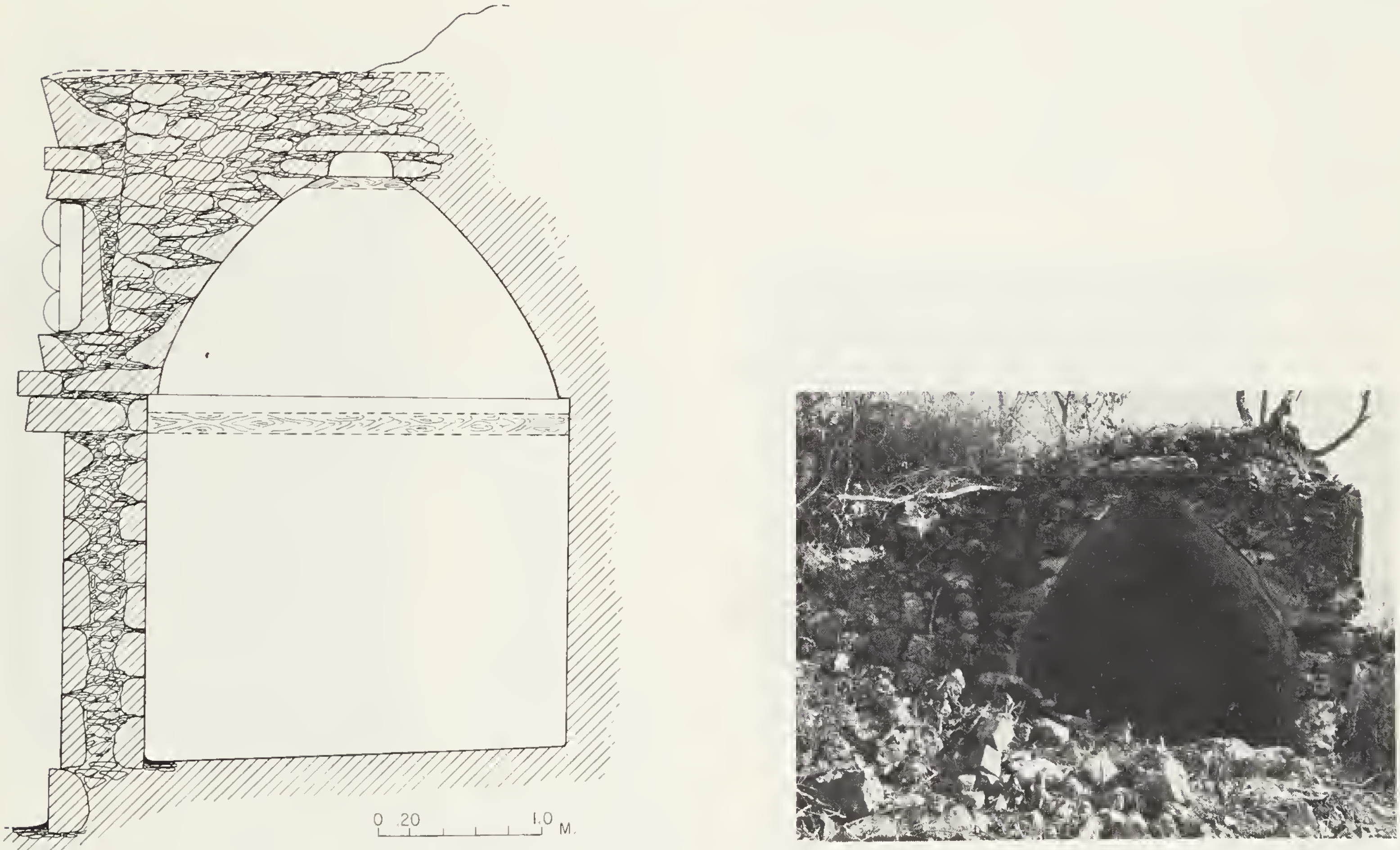


Figure 685. Almuchil, Structure 3, west facade.



a

b

Figure 686. Almuchil, Structure 3, Room 1: a, transverse section; b, view from north, showing vault and west facade in section.

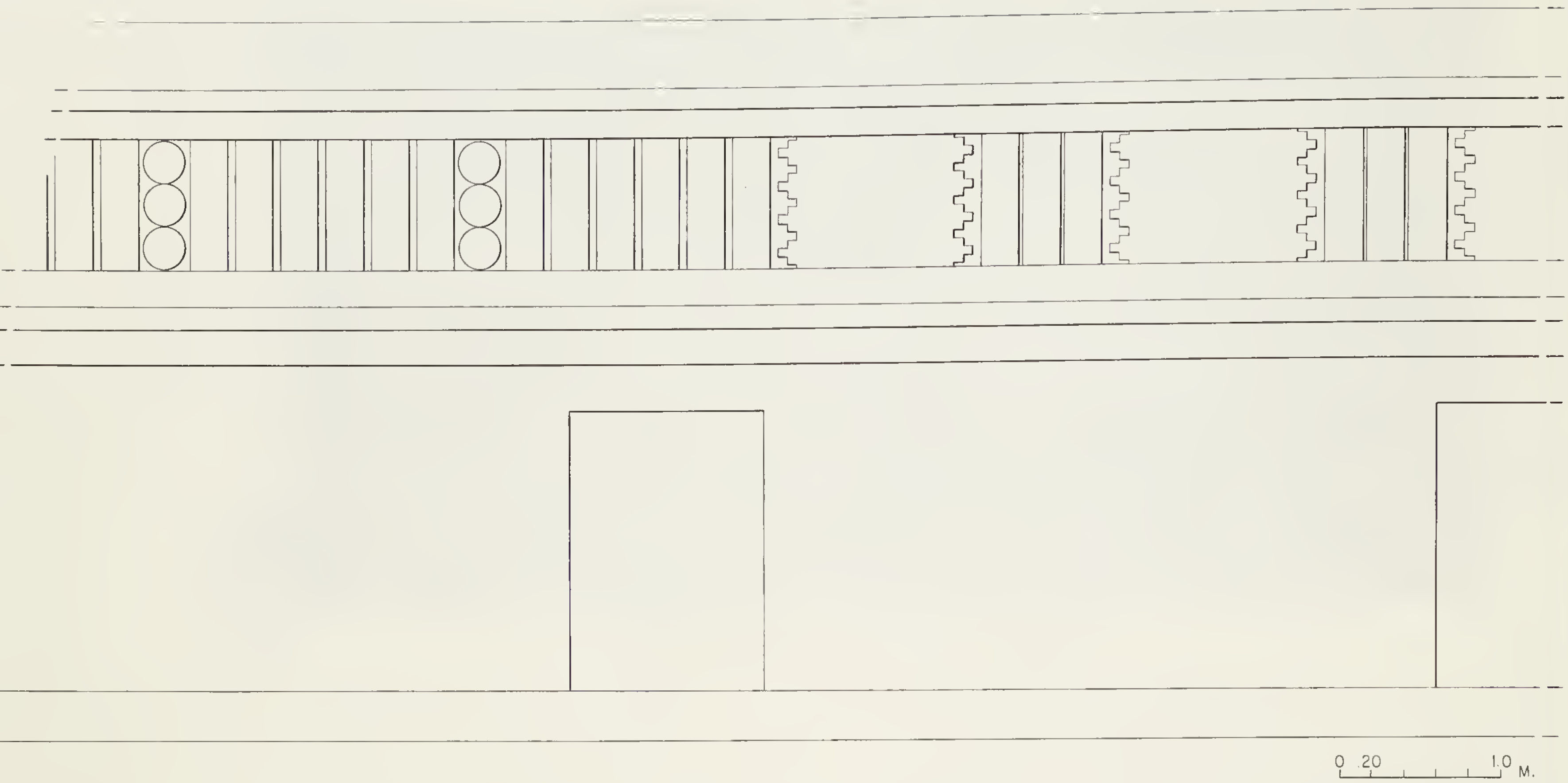


Figure 687. Almuchil, Structure 3. Restored elevation of part of west facade of lower story.

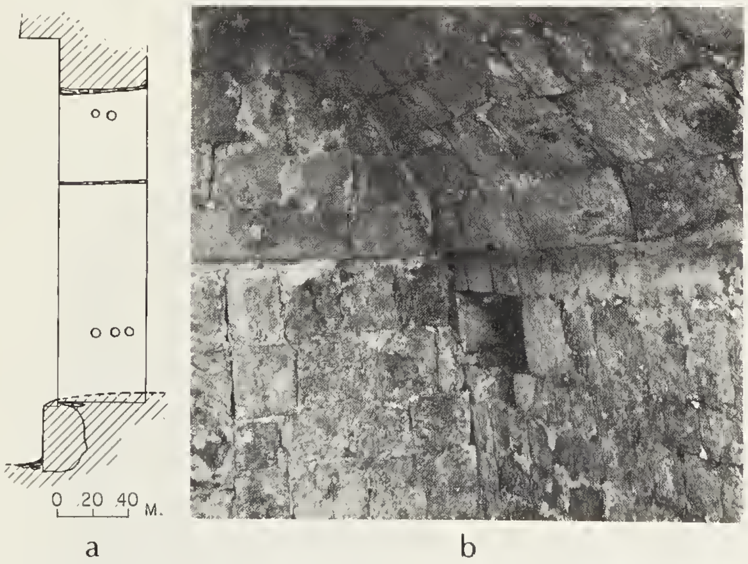


Figure 688. Almuchil; Structure 3: a, section through doorway to Room 2; b, view of northeast corner of Room 3, showing wall and vault masonry and beam socket.

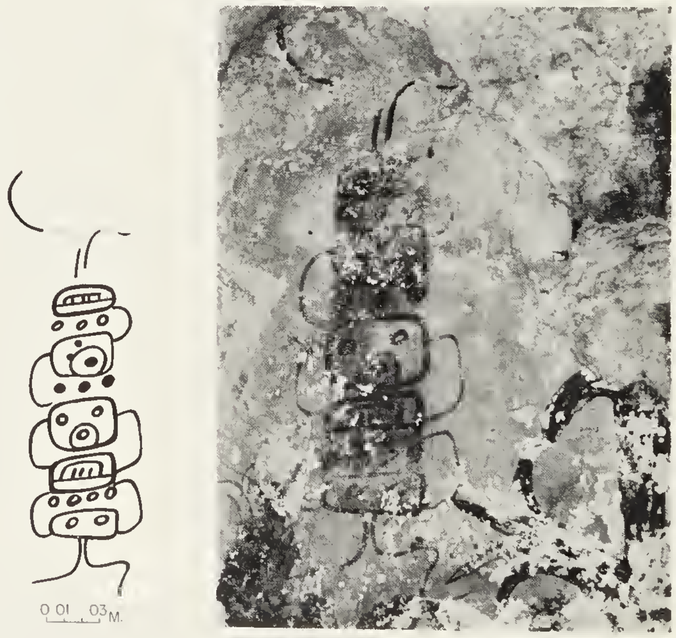


Figure 689. Almuchil, Structure 3. Column of glyphs painted on north end of vault in Room 3.

Vaults and Beams. Vault stone semispecialized and moderately well cut, faced, and fitted (figs. 686, 688b). Nicely cut, rather specialized capstones. Cleavage in masonry formed by rough construction face between vault and upper facade masonry clearly seen here.

Sockets for heavy beam just below spring of vault at each end of room and for three small beams at each end and center of room just below corbeled courses under capstones (fig. 686a).

Moldings. Three-member medial molding of lower apron member, small rectangular string course in middle, and upper reverse apron (figs. 685, 686a, 687). Cornice molding same except for heavy coping course.

Decoration. Northern half of upper facade carried groups of six split columns separated by three balls arranged vertically (figs. 685, 687). Ball is rare as decorative motif in Puuc architecture (but see Chuncatzim, Str. 2, p. 58, and Chacbolay, Castillo, p. 349). Southern half of upper facade had groups of three split columns separated by plain areas edged with four stepped pyramid or dentate elements (cf. Xcochkax, Second Tier Building, fig. 647b, above). Maler (1902, pp. 213–214) thought these plain areas had once been ornamented with sculpture.

Traces of red paint remain at a number of places on the facade. In Room 1 traces of bands of red and blue paint were observed on the rear (east) wall and traces of red paint on the walls of Room 2. Room 3 showed remains of paintings in red and blue, of which a column of hieroglyphs was discernible high on the north end wall (fig. 689). The glyphs are in red with a heavy black outline. See Maler 1902 (pp. 213–214) and Ruz 1945 (p. 45) for description of and comments on decoration.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Interior wall masonry of Room 3 noticeably better than that of Rooms 1 and 2, and vault of Room 3 springs from different level from vaults of Rooms 1 and 2. Along with change of decoration near center of western facade, these differences suggest that two stages of building are present here. We were not, however, able to find any clear proof that the north and south segments of the lower story represented different periods of construction.

Our notes do not indicate whether the solid platform behind Rooms 1–4 is of the same period or secondary to those rooms. The second story was obviously erected after the platform was built and thus must be either secondary or tertiary to Rooms 1–4.

Structure 4 ?

Approximately 250 m west-southwest of Structure 3 and on the southern border of the central area is a small closed court with structures on all four sides. Only the northern and western buildings, which I am calling, respectively, Structures 4 and 5, are in sufficient state of repair to provide any architectural details. Structure 4, the northern building, oddly enough faced north, away from the court to the south. It was a structure with six rooms on the ground floor, behind which was a solid platform that once supported a second story, now almost totally fallen. The upper story is not shown in our plan and only the base molding is shown in the section.

SUPERSTRUCTURE

Plan. See figure 690. Incomplete.

Section. See figure 691. Stairway not shown.

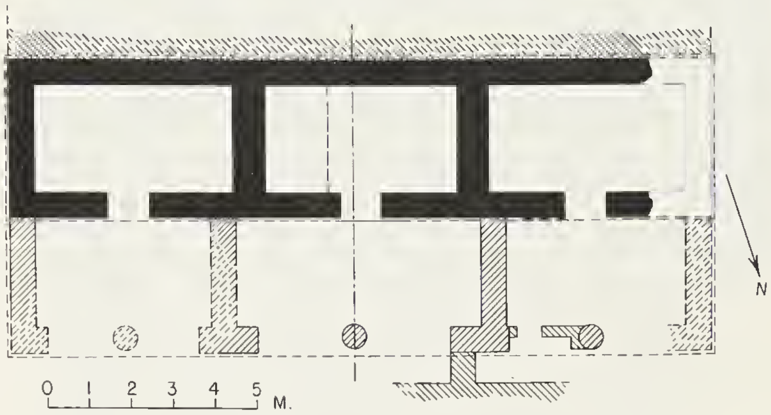


Figure 690. Almuchil, Structure 4. Plan of lower story at north.

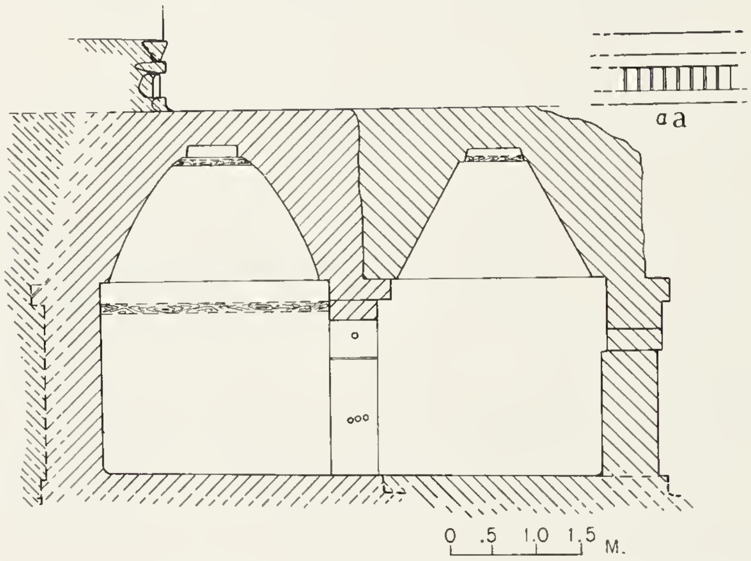


Figure 691. Almuchil, Structure 4. Transverse section through lower story at north and base molding of upper story: a, detail of base molding.

Base Molding. First-story base moldings buried and design not known. Second story carried a four-member molding (fig. 691) of rectangular, colonnettes, rectangular, and reverse apron members in ascending order.

Stairway. Flight of stairs rose over vaulted passage on north side of building. Stairway, now badly fallen (fig. 692), led to roof of first story, which formed terrace in front of second-story rooms. Understairs passage divided by transverse wall (fig. 690).

Floor. Section shows no rise in floor level to inner rooms, which is unusual, and may be an error in our records.

Walls. Outer walls approximately .60 m thick. Medial wall .55 m thick at jambs, but probably swells to .60 m

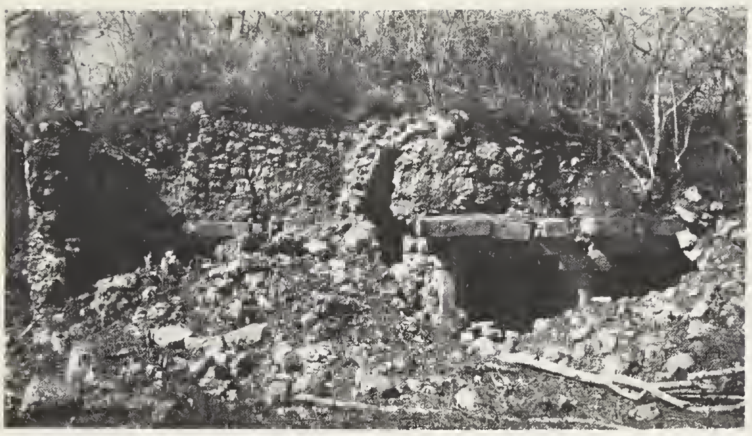


Figure 692. Almuchil, Structure 4. View from northeast, showing fallen northeast vault, central outer doorway, and remains of stairway to second story.

thick at room corners. Transverse walls between rear rooms .70–.75 m thick, between front rooms about .60 m.

No notes on wall masonry of first story. Wall stone in debris of second story well cut and faced.

Doorways. Inner doorways are approximately 1 m wide and are built of full-width jamb stones and stone lintels. Front (north) rooms entered by double doorways formed by single column in each entrance. Columns .55–.60 m in diameter and support rectangular capitals about 1 m wide by .60 m deep (fig. 693). Full-width jamb stones carry corbels that project about .10 m. Intervals between column and jambs in center doorway, which are spanned by huge stone lintels (fig. 693), measure 2 m. Openings in east and west front entrances, also spanned by stone lintels, 1.50–1.60 m wide.

Wall Depressions. Only wall depressions observed were rod sockets in jambs of doorways to inner rooms (fig. 691).

Bench. Remains of bench about .50 m high and 1.50 m deep across east end of rear central room.

Vaults and Beams. Vaults of northern rooms, which are secondary to southern rear rooms, spring from first course of old medial molding on earlier facade (figs. 690, 691). I have no notes on vault masonry but photograph (fig. 694) of front (north) middle vault seems to show semispecialized stone. Soffit slopes of front vaults somewhat flatter than slightly arched soffits of rear vaults.

Three small beams, one near each end and one at center of vault, once occurred just below small offset course under capstones in rear (south) vaults (fig. 691). Two larger beams, one near each end of each room, in second course below spring of vault in rear rooms. In front (north) rooms only two small beams in small offset under capstones in each room.

Moldings. Only one course of medial molding, a heavy rectangular member, preserved on old facade of inner rooms and on later north facade (figs. 691, 692). No cornice molding remaining.

Roof. Some roof preserved in front of upper-story base molding. Roof cap .40–.45 m thick and nothing unusual in construction.

Decoration. Banded split column and series of diamonds arranged vertically on lower facade just east of central outer doorway (fig. 693) only decoration observed.

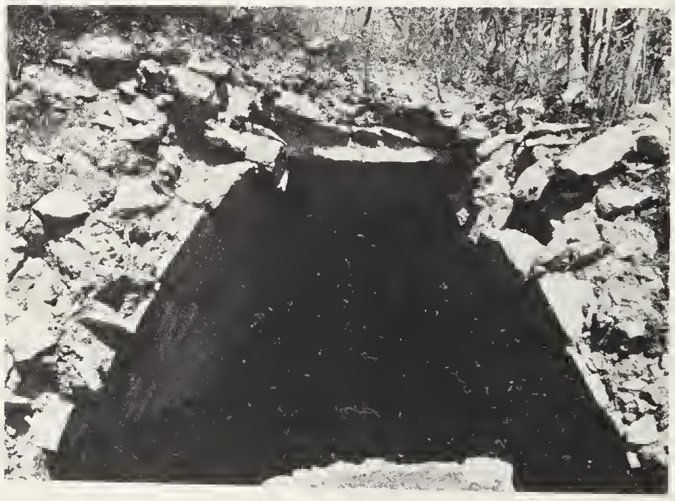


Figure 694. Almuchil, Structure 4. Vault of front center room, looking west.

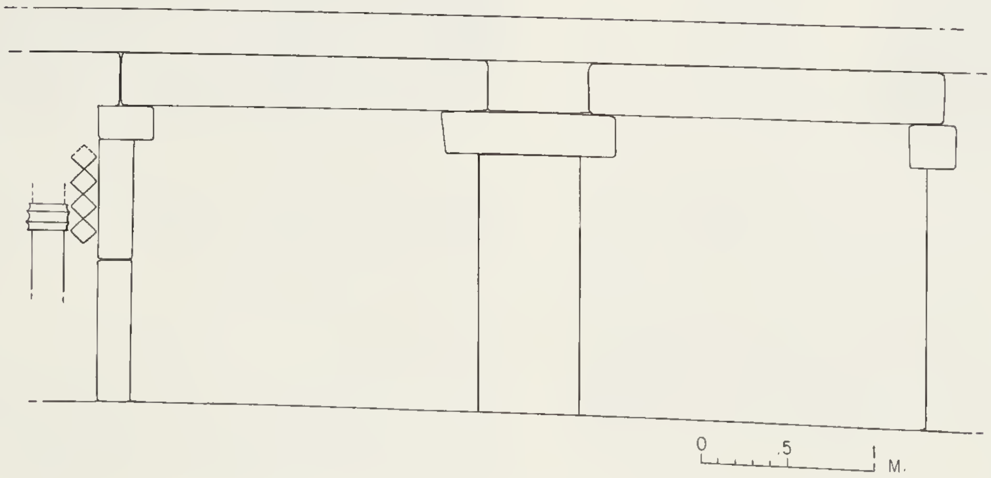


Figure 693. Almuchil, Structure 4. Elevation of outer central doorway.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Three rear (south) rooms represent earliest construction. Do not know if upper facade (north) of this stage was completed and later torn down when front rooms were built, or if secondary front rooms were constructed before upper facade of inner rooms was completed. Secondary stage of building represented by three front (north) rooms with wide columnar doorways. Still later a third stage of construction consisted of a stairway over a vaulted passage built against the north facade, a solid masonry platform erected against the south facade of the early range of rooms, and a second-story building, now almost totally collapsed.

Structure 5

As previously mentioned, Structure 5 occupies the west side of the small closed court just south of Structure 4. The badly fallen building, which has a wide columnar doorway on the east side, seems to have faced east on the court. Altar 2 (see Monuments, below) was found in the court in front of this building.

SUPERSTRUCTURE

Construction. Exterior wall masonry of well-cut, faced, and fitted stone; interior facing considerably cruder. Walls .60 m thick at doorjambs. Wide doorway (fig. 695) has single column at center with openings approximately 1.85 m wide on each side. Jambs are built of large, full-width, well-cut stone, and support corbels. Very heavy stone lintels, .40 m thick, also well cut. Column, which supports rectangular capital, is markedly flattened on sides. This trait common in Xculoc region.

At a higher level and just west of the room with the columnar doorway is a small chamber with a drain or vent near the floor in the south end wall.

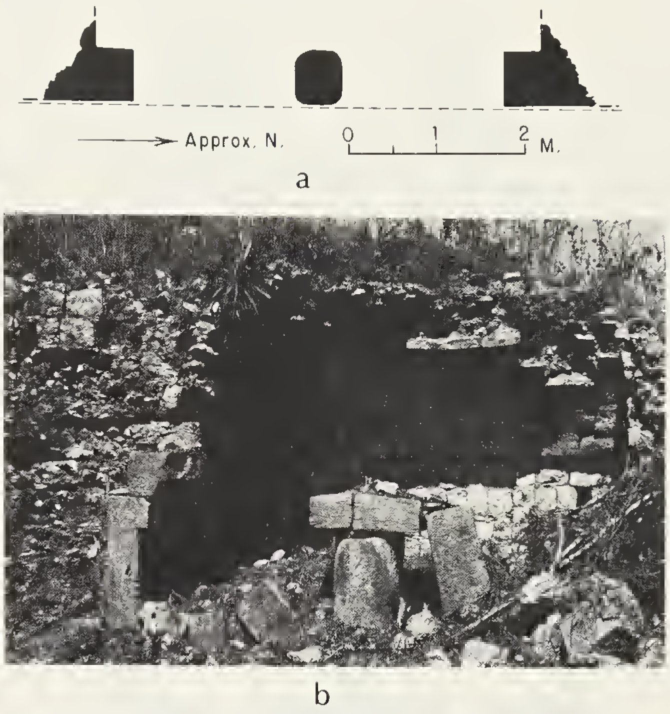


Figure 695. Almuchil, Structure 5, east doorway: a, plan. b, view from east.

Structure 6

(Building of Two Rooms)

About 20–25 m west of Structure 5 is Structure 6, called by Maler (1902, p. 214 and fig. 12) the Columnar Building of Two Rooms. The little building, of which the eastern room is relatively well preserved, faced north.

SUPERSTRUCTURE

Plan. See figure 696b.

Section. See figure 696a.

Elevation. See figure 696c. Incomplete and partly restored.

Base Molding. Single course of dressed stone .34 m high and projecting only .03 m (fig. 696).

Walls. Front wall .55 m thick at doorjambs; rear and end walls .65 m thick; central transverse wall .96 m thick. Outer wall facing of fairly well-cut, faced, and fitted stone (fig. 697), inner facing considerably cruder.

Doorways. Full-width jamb stones and stone lintels. Doorway .96 m wide.

Vaults and Beams. Vault rather low in proportion to width and considerable curve to soffit slopes (fig. 696a). Wide capstones with span of .90 m between supporting corbels. I have no notes on the vault masonry.

Two beams, one at each end of room, one course below spring of vault, and four small beams spaced along length of vault in small offset course under capstones (fig. 696a).

Moldings. Three-member medial molding with lower apron member, upper reverse-apron member, and middle member of elements carved with a design resembling a horseshoe (figs. 696, 697; and see Maler 1902, p. 214). Each horseshoe element is a single stone in contrast to the similar design at Chunhuhub (figs. 673, 674) where one stone carried several elements. Only lowest member, an apron, of cornice molding standing. Probably like medial molding but with usual heavy coping.

Decoration. Upper zone of main (north) facade carried split columns (figs. 696a, 697), the three columns at each corner being banded in an unusual manner (see Maler 1902, fig. 12). A fallen stucco figure (fig. 698), possibly representing a bat, was in position over the eastern doorway in Maler's (ibid.) time, and there presumably once was a figure over the western entrance. The upper facades at the ends and rear of the building seem to have been plain.

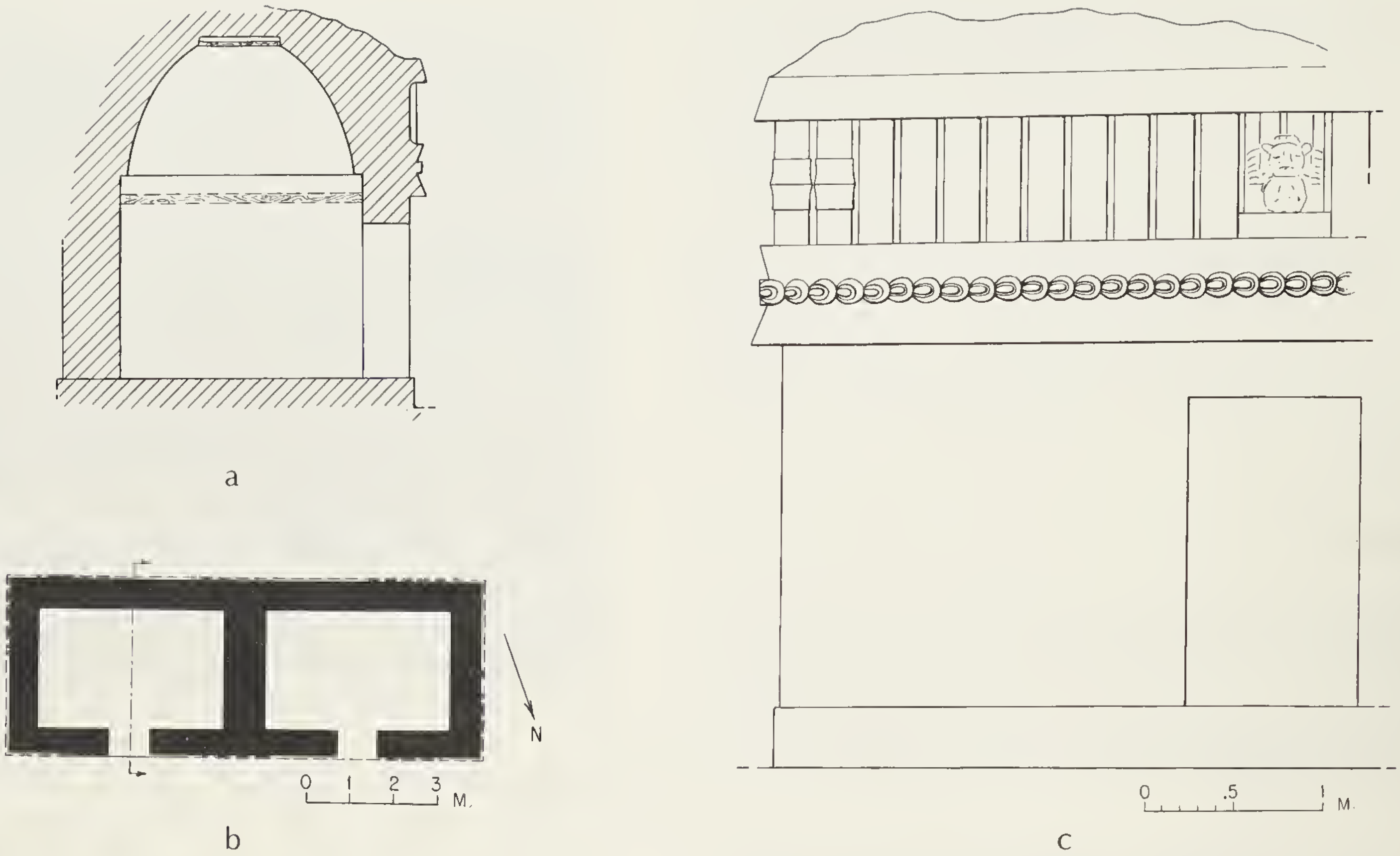


Figure 696. Almuchil. Structure 6: a, transverse section through east room; b, plan; c, restored elevation of eastern half of north facade.

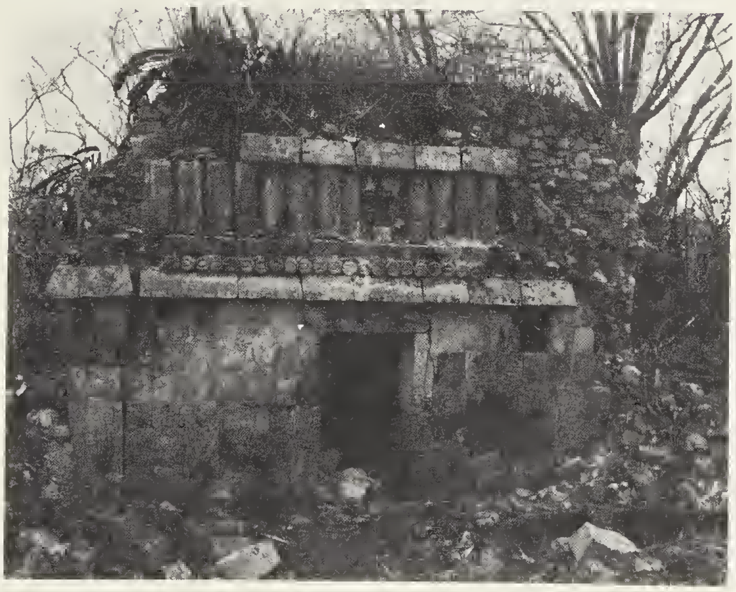


Figure 697. Almuchil, Structure 6. View from north.

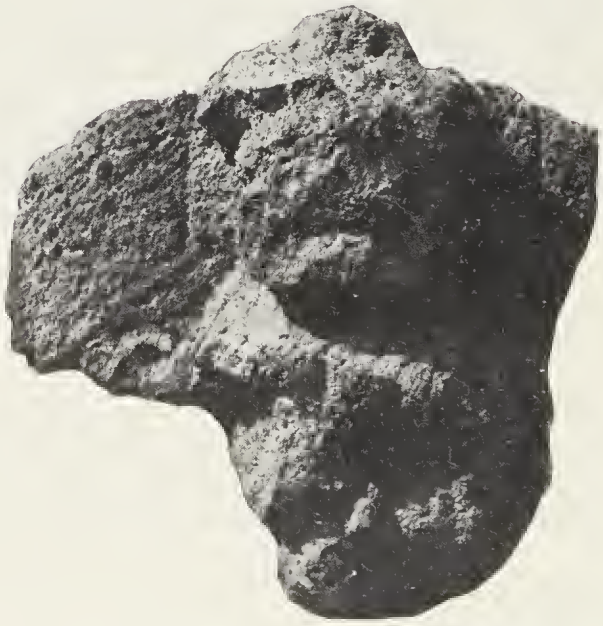


Figure 698. Almuchil, Structure 6. Stucco figure of bat (?) from over doorway to east room.

MISCELLANEOUS SCULPTURE

M1. Stone phallus (fig. 699) broken into four parts, only two of which are shown in photograph. Original length over 3.20 m; diameters of elliptical section of head .60 m and .52 m; of body .50 m and .42 m. Lying on surface in small court approximately 100 m southwest or west-southwest of Structure 3. This sculpture, which was also observed by Maler (1902, p. 214), is the largest phallic representation that I know of.

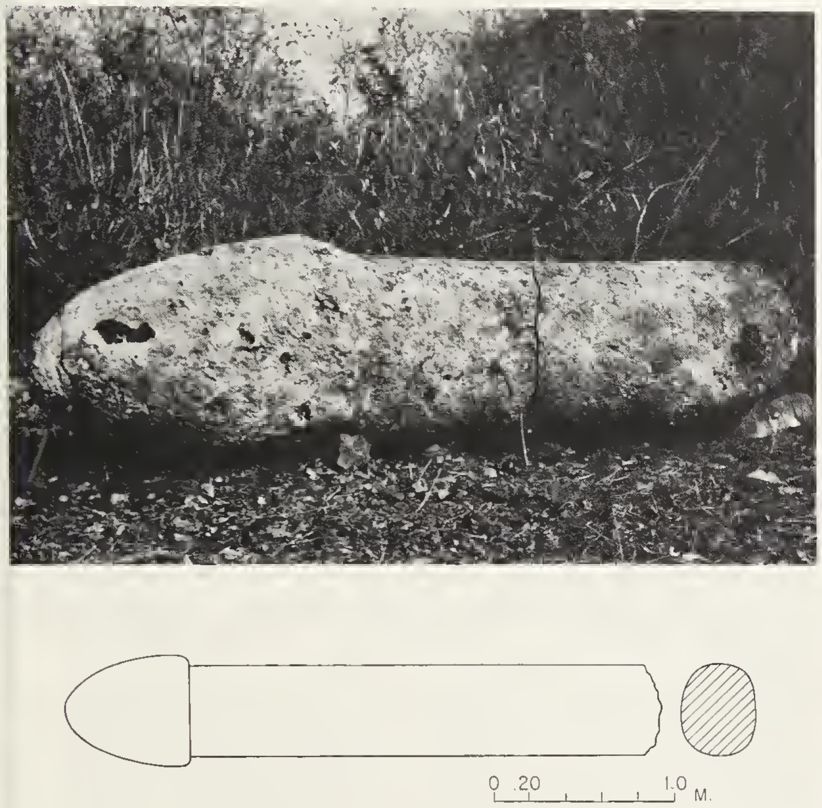


Figure 699. Almuchil. Miscellaneous sculpture, M1, stone phallus. Photo shows only half of stone.

MONUMENTS

ALTARS

Altar 1. Plain (fig. 700a). Height .64 m; diameter at top .76 m, at bottom .57 m. Located short distance in front (west) of Structure 3. Well-worked drum altar of conventional design. This would seem to be same monument referred to by Maler (1902, p. 214) as "a large sacrificial or justice column."

Altar 2. Plain (fig. 700b). Height .58 m, width .42 m, depth .47 m. Located in court before Structure 5. Unusually shaped rectangular altar.

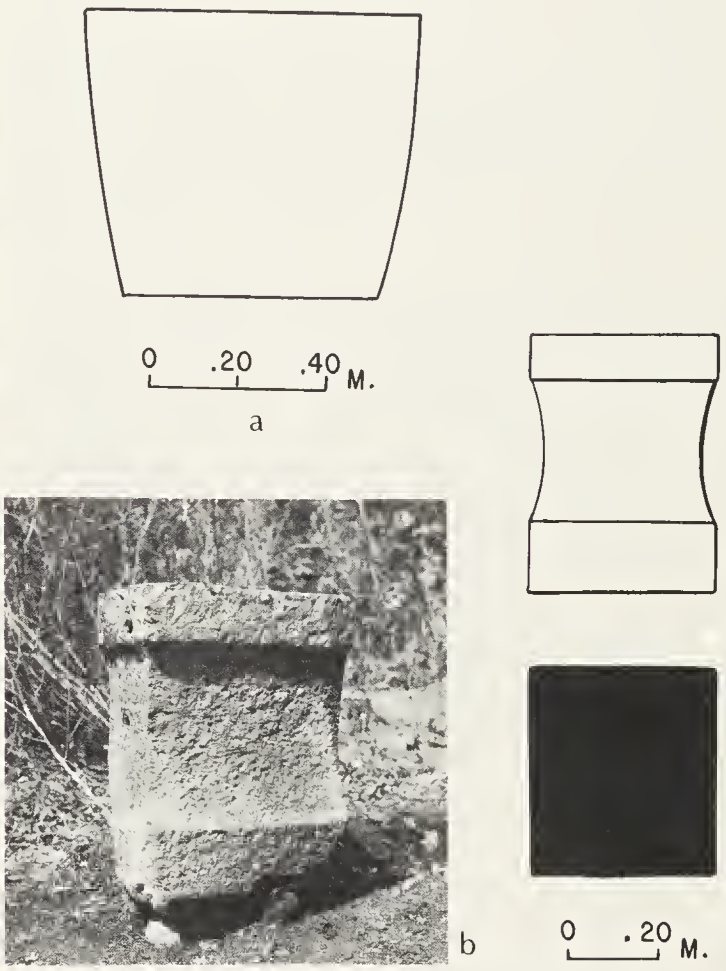


Figure 700. Almuchil. Altars 1, 2. a, Altar 1; b, Altar 2.

6 · Xcalumkin and the Northern Ruins

Some 20 km west of Xculoc and its area of neighboring ruins and about 10 km east of the western edge of the Puuc hills lies the savanna of Xcalumkin and the important ruin site of that name (frontispiece). North of Xcalumkin as far as the town of Dzitbalche is an area limited on the east by the Yucatan border and on the west by the foot of the Puuc hills—marked by the railroad line from Becal to Hecelchakan—that shows a high concentration of ruins. The architecture of these sites and of Xcalumkin covers a considerable range of style and exhibits many of the traits characteristic of the Campeche ruins, or what might be termed the western branch of the Puuc.

North of Dzitbalche, in the triangle formed by the state border and the rail line, the archaeological map (frontispiece) shows an area almost devoid of ruins. The region merges at the north and east with an area in Yucatan that is equally lacking in ruins, a situation that has been mentioned earlier (see p. 281). Again, I suggest that this apparent absence of ancient remains may come about through lack of exploration rather than portray a true state of affairs.

Xcalumkin

This site was discovered by Teobert Maler (1902, p. 202) in 1887 and was named by him after the savanna on which the ruins are found. Over 30 years later S. G. Morley (1918) and Thomas Gann (1924, pp. 181–189) visited the site and rechristened it Holactun, a name presumably supplied them by some local inhabitant and meaning "opening or mouth of the cave" (Roys 1935, p. 7). I believe that the name Holactun applies only to the Main Group at the site and derives from one or both of two nearby cenotes (see Morley 1937–38, 4:249). At the time of our visit to Xcalumkin (Pollock 1935) a native from the nearby village of Cumpich gave the name of the ruins, again referring to the Main Group, as Yokactun, meaning "beside or above the cave" (Roys 1935, p. 7). The site is of course far larger than just the central group of remains, extending widely over the savanna and with structures and groups of structures at considerable distances from the Main Group and its nearby cenotes (fig. 701). It seems to me better, then, to retain the name, Xcalumkin, originally given the site by Maler.

ETYMOLOGY

Maler (1902, p. 202) says the probable meaning of *Xcalumkin* is "doubly good soil exposed to the sun." R. L. Roys (personal communication) believes Xcalumkin probably to be the same as *calomkin,* "window where the sun enters," a word that appears in the Motul Dictionary (see Martinez 1929, p. 170) and the San Francisco Dictionary. Roys (1933, p. 82) also notes the similarity of Xcalumkin with Tix-calom-kin, a place-name cited in the *Book of Chilam Balam of Chumayel.* Whether or not Xcalumkin and Tix-calom-kin are indeed the same place, I think that Xcalumkin is almost surely a truly ancient place-name. Variant spelling: Xkalumkin. Other names: Holactun (Nolactun), Halactun, Yokactun (see above).

SITUATION

Latitude 20°08.8′ N, longitude 90°02.2′ W. Approximately 20 km west and a trifle south of Xculoc, 5 km southwest of the village of Cumpich, and 11 km east-southeast of the town of Hecelchakan. The geographical coordinates given here mark the location of the Temple Group at the southern end of the savanna.

TOPOGRAPHY

The savanna of Xcalumkin lies in a valley some 4–5 km long that follows an approximately north-south course, interrupted near the middle by low hills that divide the savanna into a northern and a southern part. The floor of the valley, which supports the typical grassy savanna growth of northern Campeche, is surrounded by forested limestone hills, at places quite steep, and is dotted by low limestone outcrops and higher isolated hills, also covered with forest. It is on these limestone eminences, hilltops, hillsides, and outcrops, that the ancient building remains are found. Although the sketch map (fig. 701) is at places deceptive in the matter, at no place did we observe building directly on the valley floor.

The site of Xcalumkin is located in the southern part of the savanna, only the North Group lying outside the southern basin. The central part of the ruins, or Main Group, covers a considerable area of low limestone outcrops and is surrounded by hills, a number of which support buildings. Other buildings on hills and low limestone eminences are scattered across the valley to the north and south of the center of the site.

WATER SUPPLY

No known permanent natural water. Dry cenote at southern edge of central area of ruins seems to reach almost to water table, was damp at the bottom in April and May 1935, and reputedly contains water during the rainy season. Smaller cenote north of dry cenote (see fig. 701) was dry at time of our visit but contained many sherds of water jars. There is also the cenote at Cumpich, some 5 km distant (see p. 456).

Great number and variety of chultuns or water cisterns. These occur with house groups built on low rock outcrops in the savanna, with circular drainage platforms about 8 m in diameter similar to many noted at Sayil (e.g., see p. 90) and at Kabah (e.g., see p. 171), with hillside platforms that caught drainage from hills, and in courtyards of formal architectural groups. Greater variety in shape than observed in eastern Puuc sites. Our examination of a number of low outcrops in savanna that had not been built on showed each one to have a small natural sinkhole beneath an opening in the limestone crust. These little caves or sinks were almost ready-made chultuns. They only needed to be cleared of debris, plastered inside, and a drainage platform built over the outcrop, which supplied much of the bulk of the platform. The number and variety of chultuns at Xcalumkin suggests early experimentation with this form of water storage.

Nearest present-day permanent water supply is from wells at village of Cumpich, about 6 km to the northeast, or from well at hacienda of Tzocchen, a little beyond Cumpich.

MAP

None but sketch map of Xcalumkin savanna (fig. 701). Abbreviated map published by Brainerd (1958, map 18) is based on map given here.

SIZE

The compact central part of the site, or Main Group, covers an area some 150–200 m on a side. Just outside of the Main Group is a semicircle of buildings located on natural rises. Strung out across the savanna to the south for a distance of nearly 2 km are isolated buildings and groups of buildings resting on low rock outcrops, on somewhat higher eminences, or on hilltops. Approximately 0.5 km north of the central area are building remains that continue north or northeast for another 0.5 km or so, where there is a large group of ruins comprising possibly ten courtyards surrounded by fallen buildings. This is the so-called North Group. Whether the North Group and the buildings and groups of buildings in the southern part of the savanna are all part of a single ancient Maya city, or should be thought of as belonging to more than one settlement, I do not know, but it seems best at present to include all the remains under the label of Xcalumkin.

About 3 km east-northeast of Xcalumkin, in a neighboring savanna and presumably not a part of the site of Xcalumkin, the late H. B. Roberts observed a sizable group of ruins which he described as being "about two-thirds the size of Holactun." He also observed from a hilltop, but did not visit, a group with some standing buildings about 2 km farther east. Roberts also visited groups of ruins about 2 km east of the North Group. The area seems to have been thickly settled in ancient times.

CIVIC PLAN

Not well understood owing to lack of adequate mapping, but plan seems to be similar to that seen at Xculoc, where the central part of the site is a tightly packed arrangement of contiguous and connecting courts and plazas, from which radiate more isolated buildings and groups of buildings, often located on hilltops. Numerous remains of what presumably were simple dwellings were observed in the savanna and on hillsides (see Water Supply, above). They were for the most part not located on the map (fig. 701).

As already mentioned, the North Group is a compact assemblage of contiguous courts from which extend other more isolated buildings. This area may or may not be a part of the ancient site of Xcalumkin.

Orientation. Not well known owing to poor condition of buildings and lack of excavation. Orientation of structures seemingly highly variable, even within single group or courtyard. In common with nearly all Puuc buildings, one axis of structure consistently falls somewhat east of north. This seems to vary from about 6° to as much as 31°, and probably averages about 17°.

DATES

In the eastern room of the Initial Series Building, a column of hieroglyphs that runs from the top of the vault down the northern soffit on to the wall below the spring of the vault, almost reaching the floor, records an Initial Series (fig. 715). There have been numerous efforts to decipher the inscription (see Morley 1916, pl. 1; 1918, p. 274; 1920, pp. 358, 411, 580; 1927, p. 53; 1937–38, 1:303, 4:370; 1945, table 2; 1956, p. 73; Gann 1924, pp. 186–189; Spinden 1924, pp. 279–280; 1928, p. 149; J.E.S. Thompson 1929, p. 226; 1931, pp. 354–356; 1937, pp. 192–193, 197; 1945, p. 8; Thompson, Pollock, and Charlot

1932, p. 199; Teeple 1930, p. 52; Beyer 1931, p. 105; E.W. Andrews 1943, p. 66; Ruz 1945, pp. 50–51, 80, 96; Proskouriakoff 1950, p. 166; Proskouriakoff and Thompson 1947, pp. 146, 147, 149). The Beyer (1931), J.E.S. Thompson (1931; 1937), Proskouriakoff and Thompson (1947), and Proskouriakoff (1950) reading of 9.15.12.6.9 7 Muluc 1 or 2 Kankin, falling in the 13th tun of Katun 2 Ahau (A.D. 744) is favored here.

Thompson (1937, pp. 193, 197) and Proskouriakoff (1950, p. 166) mention the possibility of dates at the Hieroglyphic Group that might fall between 9.15.0.0.0 and 9.17.0.0.0, or A.D. 731–771 (and see Beyer 1941, p. 335).

REFERENCES

Maler 1902, pp. 202–204.
Marquina 1951, pp. 732–734.
Ruz 1945, pp. 47–51, 80, 96.

MAIN GROUP

There is no adequate plan of this area, which shows a deplorable amount of destruction, and if there is any primary orientation, axis, or principal avenue of approach, it was not discerned by me during our work there. The sketch map (fig. 701) gives the rough outlines of several important architectural assemblages but does not suggest the closely clustered courts and building remains that are actually present. As previously mentioned, much, if not all, of the Main Group is underlain by natural rock outcrop.

Altars 1–5 were found in the Main Group (see Monuments, below). Four of the altars (Altars 1–4) were in a court just north of the Initial Series Building, the fifth (Altar 5) in another court northeast of that structure.

Initial Series Court

Closed courtyard with partly standing buildings at north and south, those at east and west having fallen (fig. 702). One approach to court, possibly the principal one, was from north where broad stairway rises from ample, also enclosed, court with low central platform and several altars (Altars 1–4).

PLAN AND SECTION

See figures 703, 704a.

CONSTRUCTION

I have no information on the considerable substructural terracing that supports the structures around this court. The northern stairway, mentioned above, is almost totally destroyed. Stones from the steps measure .28–.29 m in height, suggesting a stair riser of about .26 m.

Besides the partly standing buildings at the north and south ends of the Initial Series Court, there are traces of several other structures. Immediately behind the northern or Initial Series building, and at a slightly higher level, are the badly fallen and deeply buried walls of a building that seems to have faced north. Little can be discerned of its

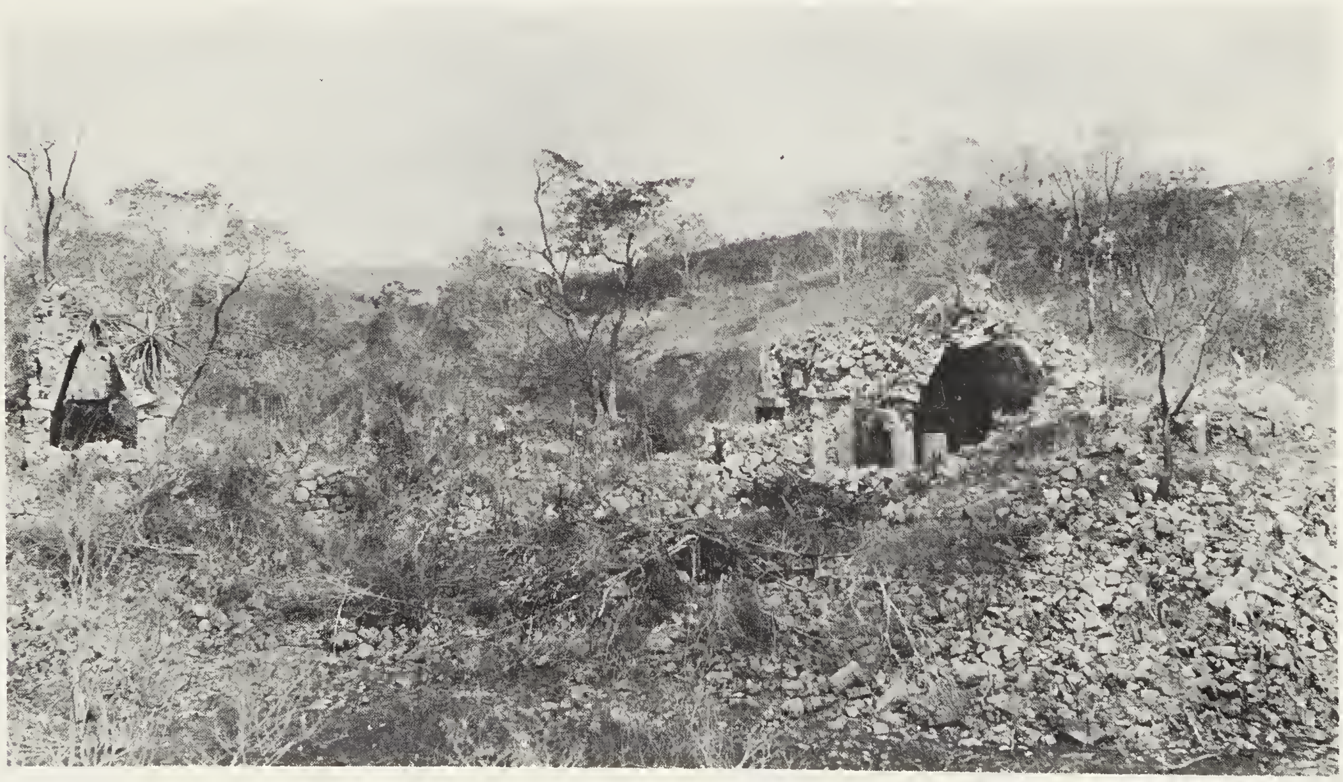


Figure 702. Xcalumkin, Initial Series Court. View from east, showing South Building at left, Initial Series Building at right.

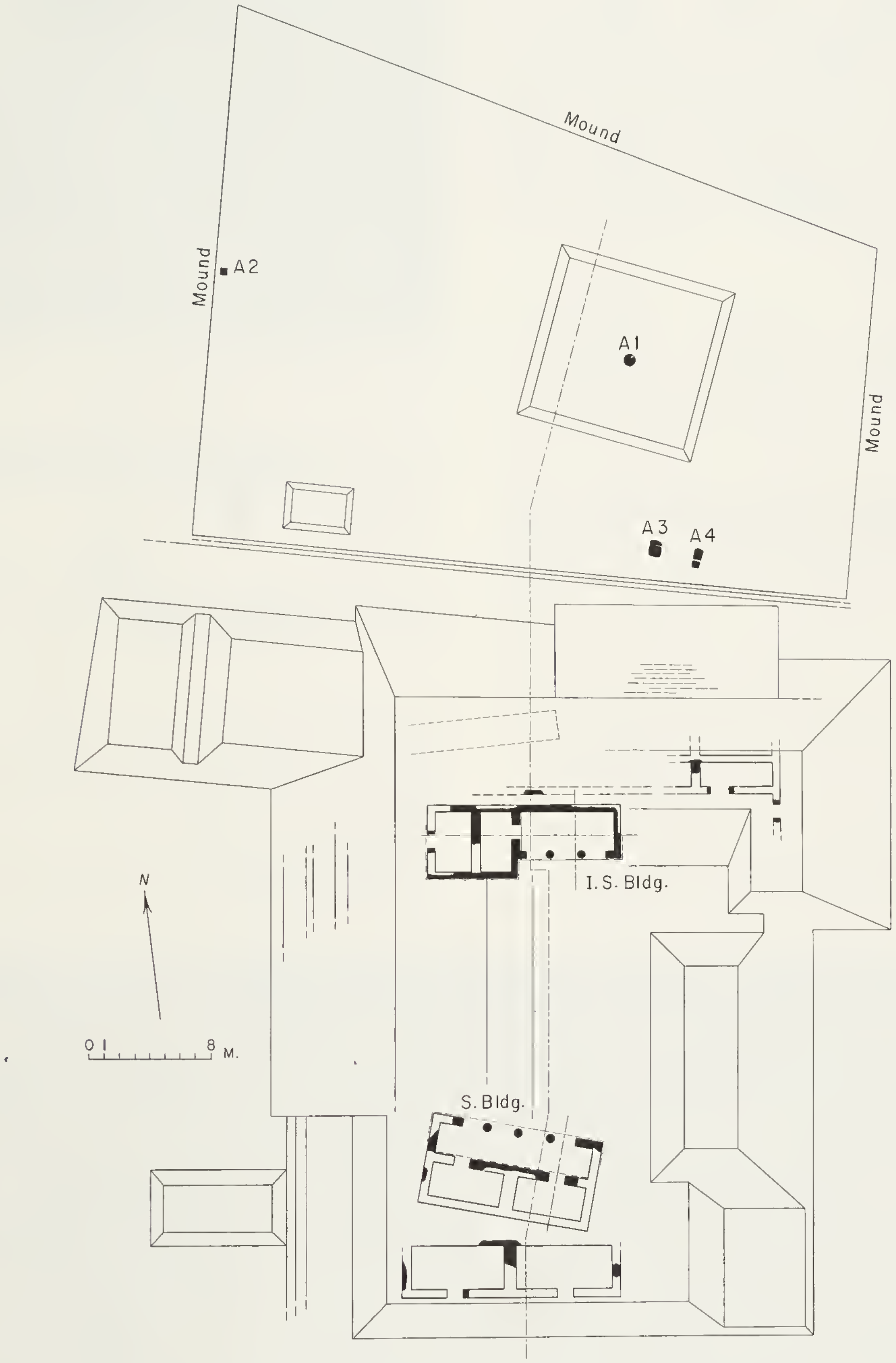


Figure 703. Xcalumkin. Plan of Initial Series Court and of lower northern court.

plan, and its association with the Initial Series Building is not well understood (see p. 425, below). Beneath it is a long, crudely constructed vaulted chamber, partly filled. The vault stones, which are rather poorly dressed, are triangular and blocklike in profile with no indication of specialization. The soffits of the vault bulge at places so that the surfaces, which are only crudely plastered, wave in and out. There seem to have been no vault beams. The room is filled with loose stone to just above the spring of the vault, and no entrance is visible. Lying beneath the floor of the building above, the chamber is suggestive of a burial vault, but it may once have stood above ground and its function is by no means clear.

Behind the South Building of the Initial Series Court, and at a lower level, are the fragmentary remains of a structure that appears to have faced south.

?

INITIAL SERIES BUILDING

(Temple of the Initial Series, Palace of Inscriptions)

This is the structure at the northern end of the Initial Series Court, and it is from an inscription inside the building that it and the court take their name. Although most of the outer facing and much of the vaulting have fallen (fig. 705), the three-room structure is nevertheless one of the best preserved buildings at Xcalumkin.

SUPERSTRUCTURE

Plan. See figure 706.

Sections. See figure 704b, c.

Base Molding. Simple, slightly projecting course of well-cut, well-fitted stone .33 m high and .25–.70 m long (figs. 704, 712).

Floor. None observed. Floor level rises from east room to middle room where step .25 m high seems to have been half-buried by floor of east room (fig. 704). Buff-colored plaster on step suggests usual floor color, but traces of red paint on plaster may indicate floor was painted red.

Walls. Rather thin. Outer wall thickness at doorjambs .56–.57 m, rear (north) wall .48 m, medial wall between middle and west rooms .64 m thick.

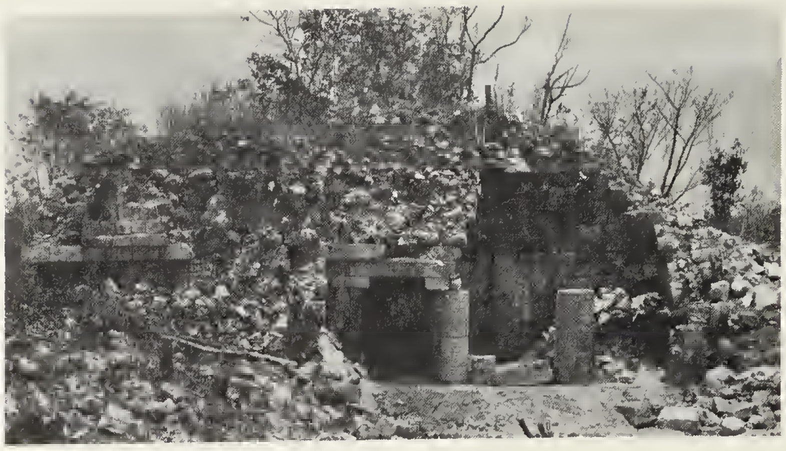


Figure 705. Xcalumkin, Initial Series Building. View from south.

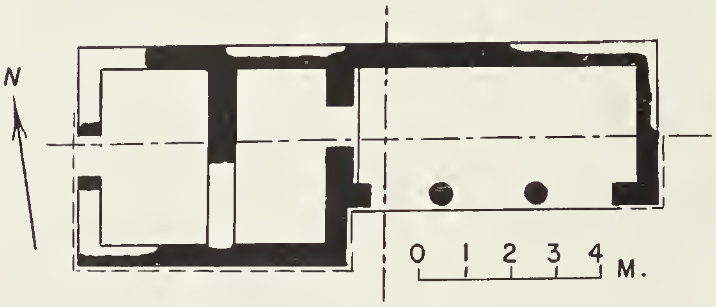


Figure 706. Xcalumkin. Plan of Initial Series Building.

Outer wall stone is well cut and fitted. Stone varies in size from about .40 × .50 m to .20 × .20 m and is of normal thickness and shape (fig. 709b). Inner wall facing not so good as outer, but better than usual Puuc inner wall stone (figs. 707, 710a, b). Stone averages about .25 × .30 m in size and again is of normal shape. Stone on west wall of east room, where there is doorway to inner room, is of outer-facing quality.

Course below spring of vault not recessed, as often true in Puuc construction, and building level at that point

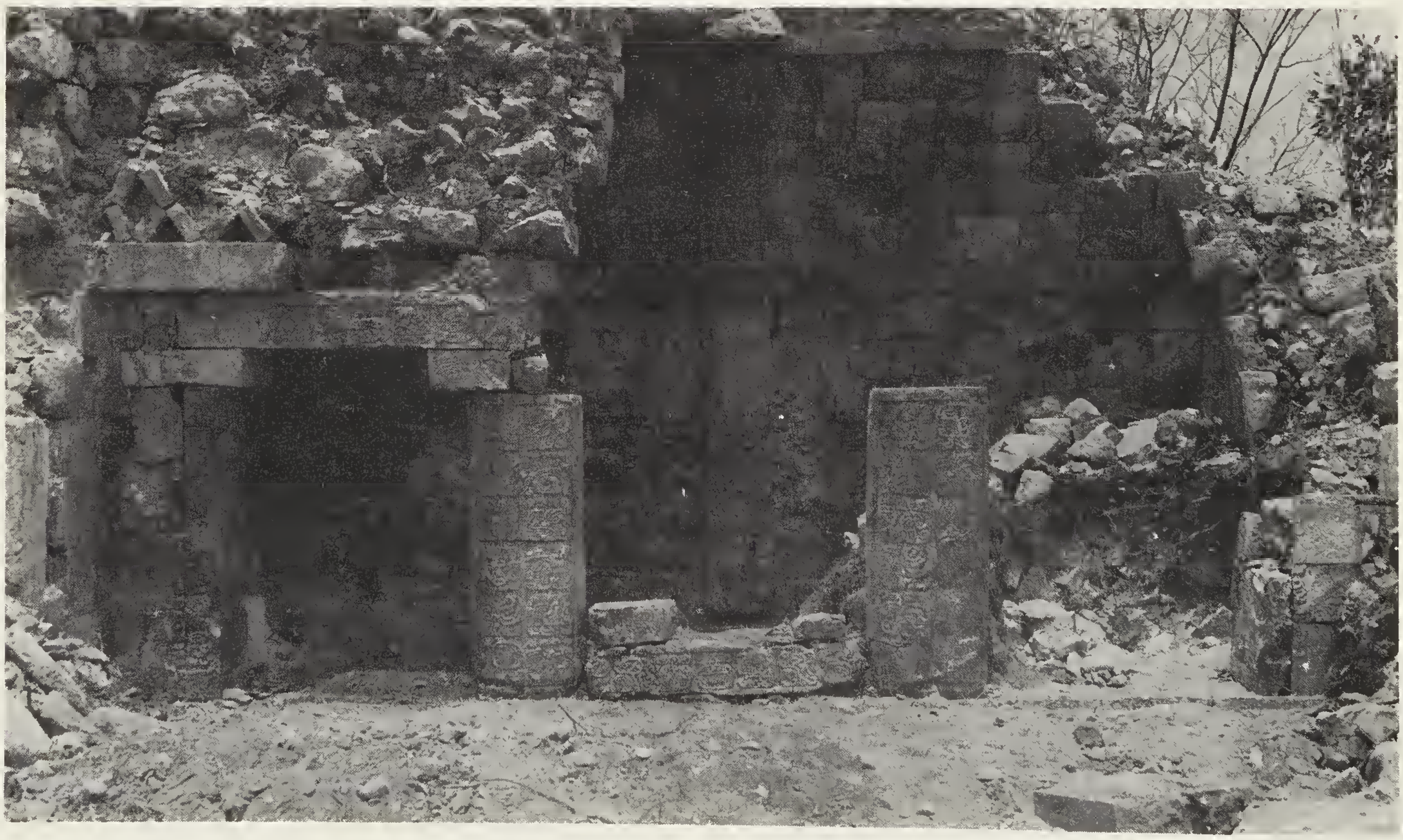


Figure 707. Xcalumkin, Initial Series Building. Columnar entrance to east room, looking north.

not clearly marked. Level visible in north wall, and possibly in wall between west and middle rooms where it seems to fall below spring.

Doorways. All jambs built of large, finely cut and dressed stones that cover full width of each jamb, except in case of inner doorway where three small stones .12–.15 m high rest at top of each jamb immediately under lintel (figs. 704, 710b). All lintels also of finely cut and dressed stone.

Columnar doorway of east room employs usual rectangular capitals on columns and corbels on jambs (figs. 707, 712). East column a single stone 1.65 m high; west column made of two drums. Almost no entasis on shaft of east column or drums of west column. Sides of east column distinctly flattened, instead of being arc of circle, and west column flattened at front and rear but less pronouncedly at sides (fig. 708a). East column measures .62 m east-west, .58 m north-south; west column .62 m east-west, .56 m north-south.

Outer face of doorway covered with hieroglyphic inscriptions and bas-relief figures carved on faces of jambs (see Decoration, below).

Well Openings, Depressions, and Projections. Small windows or ventilators at either end of middle room and of west room (figs. 709a, b, 710a). Located roughly at center of each end wall one course (.22–.24 m) below level of spring of vault. Openings about .12 × .16 m in size.

Ventilator at north end west room fallen, that at north end middle room secondarily (?) blocked so as to form depression .40 m deep. Possibility of same type opening, later made into a depression, in rear wall of east room, .60 m from east end and one course below spring of vault.

Pair of typical one-tongue cordholders at either side of doorway in middle room (fig. 709c, 710b).

Seems to be butt of broken stone peg or tenon in front wall at west of west lintel of columnar doorway (fig. 710c).

Vaults and Beams. Proportions of vaults relatively wide, low, and with pronounced spread at capstones (fig. 704). This less true in middle room than in east and west rooms. Soffit slopes only slightly concave.

Vaulting distinctly in Puuc tradition but not of advanced Puuc style. Stones are of medium size, averaging about .30 × .30 m on the exposed surface, and are well faced (fig. 707), but show comparatively little attention to fashioning the backs or tenons. Block and triangular forms are standard and there is little suggestion of the specialization that appears in fully developed Puuc vaulting (figs. 704c, 709a, 711). Stones forming spring of vault are normal, as are small corbels under capstones. Capstones are long and finely cut and dressed.

No beam sockets seen in east room. Middle room once had beam near each end of vault, one course below corbels under capstones, and probably but not certainly large beam at each end of room just below spring of vault.

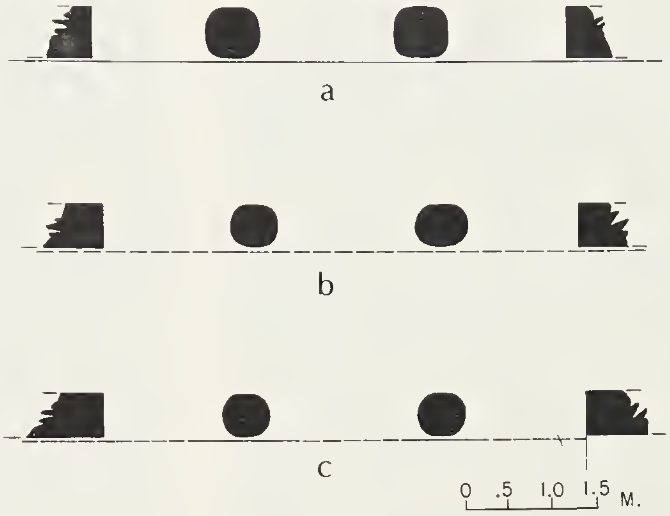


Figure 708. Xcalumkin. Plans of columnar entrances: a, Initial Series Building; b, Hieroglyphic Group, Middle Building, south doorway; c, Hieroglyphic Group, South Building, north doorway.

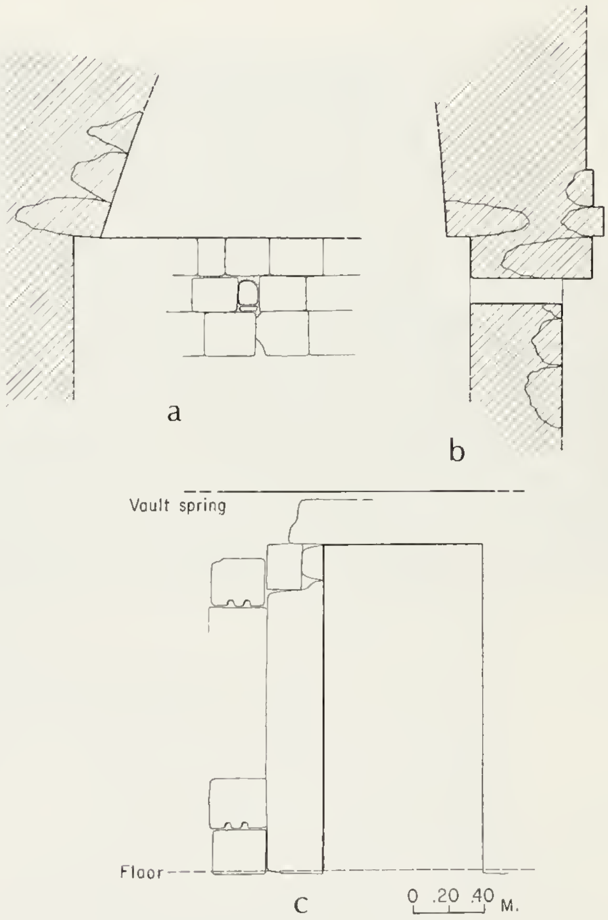


Figure 709. Xcalumkin, Initial Series Building: a, b, interior elevation and section of ventilator of south end of west room; c, cordholders in middle room at north side of doorway to east room.

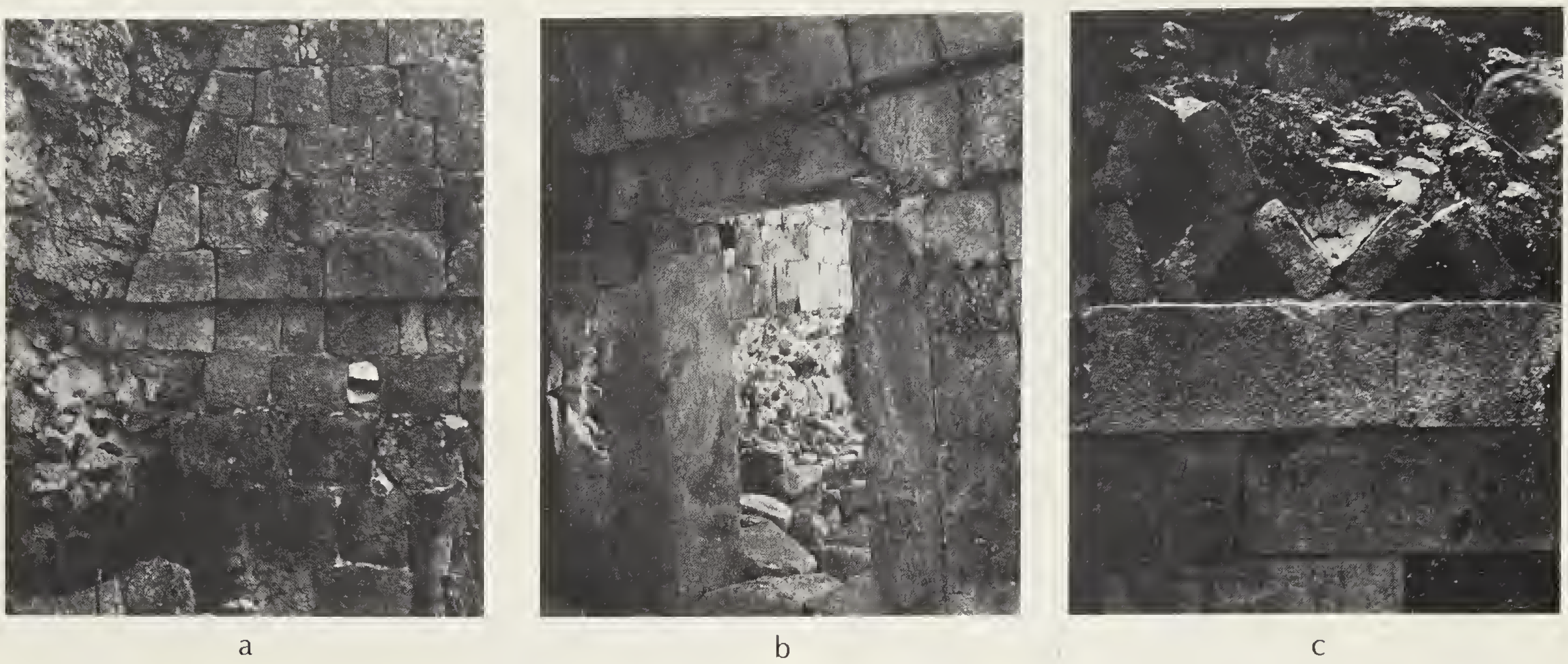


Figure 710. Xcalumkin, Initial Series Building: a, south end of west room, showing ventilator in end wall; b, northeast corner of middle room, showing doorway to east room and cordholder at right of jamb; c, detail of facade decoration, medial molding, west end of west lintel of columnar entrance, and broken stub of peg or tenon just left of lintel.

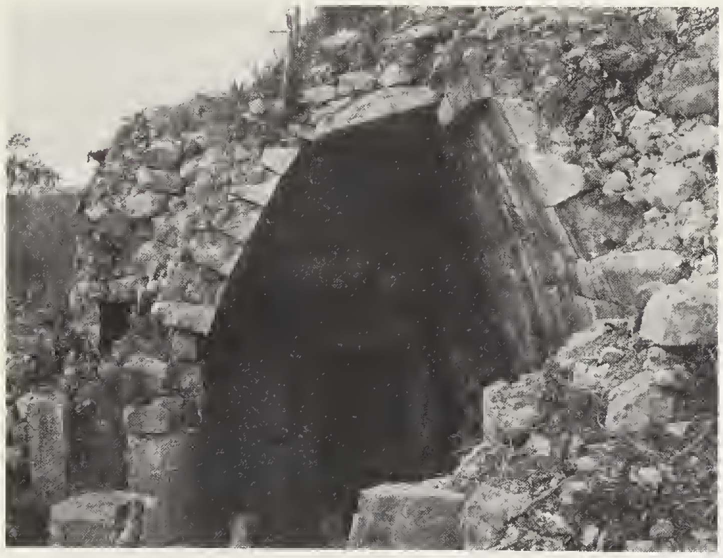


Figure 711. Xcalumkin, Initial Series Building. East room, looking west, and showing vault in section and doorway to middle room

West room presumably had same arrangement of beams as in middle room.

Moldings. Medial molding across front (south) of east room a simple rectangular string course, and fragment of latticelike decoration immediately above it seems to indicate there were no other members (figs. 710c, 712). Three-member molding of rectangular members at south end of middle and west rooms (figs. 704c, 709b). Plain upper facade above this molding. No trace of cornice molding remaining.

Roof. None of plaster surface visible. Roof cap seems to have been about .44 m thick from underface of capstones to foot of roofcomb.

Roof Structure. Fragment of what seems to have been roof comb about .66 m thick that is footed on rough stratum of roof cap over rear (north) half of vault of east room (fig. 704c). Roof comb faced with typical wall stone. Many pieces of modeled stucco, some resting on roof, in building debris. Some or all of stucco fragments probably came from roof comb.

Decoration. Columnar doorway of east room elaborately decorated with hieroglyphs carved on fronts of columns and capitals, and on outer edges of jambs, corbels, and lintels (figs. 707, 712; and see Maler 1902, fig. 4). Face of west jamb carries bas-relief of elaborately attired human figure (fig. 713a; ibid., fig. 5; and see Proskouriakoff 1950, fig. 94c). Only lowest stone of east jamb and fragment of carving from stone above found (figs. 713b, 714), but these indicate same figure as on west jamb. See Ruz 1945 (pp. 48–49) and Proskouriakoff 1950 (pp. 138, 166) for description and discussion of sculpture on jambs. Stones from west jamb seem to have been removed to Archaeological, Ethnological, and Historical Museum in Campeche (Pavon 1942, pp. 42–43).

Remnant of latticelike facade decoration above medial molding over west jamb of columnar doorway (figs. 710c, 712; and see Maler 1902, fig. 4). Execution of lattice design strikingly different from mosaic of X-stones seen in Yucatan ruins (but see fig. 430a, for similar technique at Uxmal).

At center of rear wall of east room, extending from corbels under capstones almost to floor level, is raised panel of hieroglyphs that record an Initial Series (figs. 704b, c, 707, 715; and see Ruz 1945, fig. 24). See Dates, above, for reading of Initial Series date.

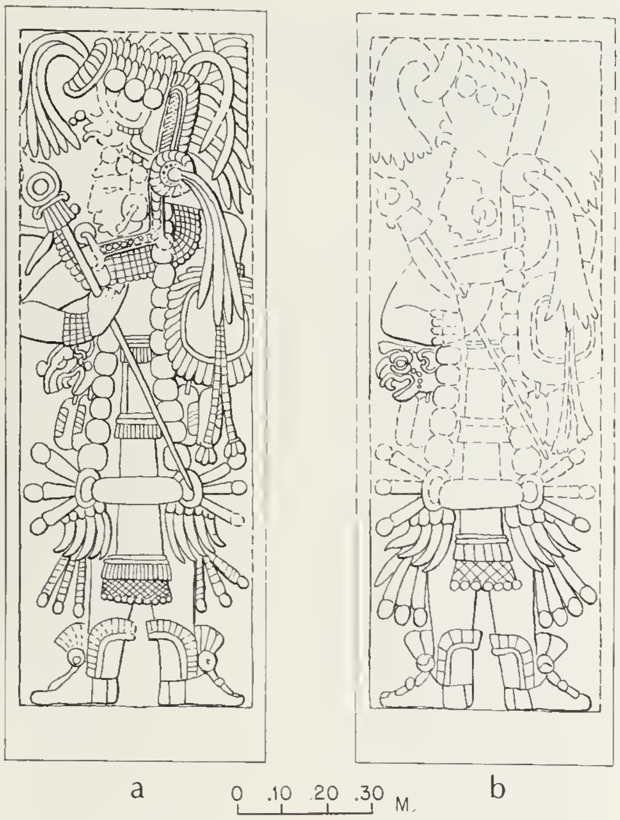


Figure 713. Xcalumkin, Initial Series Building. Sculpture on jambs of entrance to east room: a, west jamb; b, east jamb; figure on east jamb may have faced to right (out of doorway) rather than as shown in drawing.

Many small pieces of modeled stucco in debris. Some pieces on roof of building so probably from roof comb. Modeling shows plumes and what possibly are parts of human figures.

Traces of red paint on outer wall surface below medial molding, on medial molding, below corbels under capstones in east room, and possibly at top of Initial Series panel. Bits of green and red paint on corbels under capstones, and trace of wall painting on west end wall, above doorway, in east room (and see Maler 1902, p. 203). All remaining capstones of that room show signs of fresco painting.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Pretty surely several periods of construction involving Initial Series Building, building north of it, and buried room beneath the latter, but impossible to determine sequence without extensive excavation. Tight fill of stone and mortar upon which northern building rests seems to be contemporary with hearting of rear wall of Initial Series Building, and outer facing of rear wall of latter ends just below floor that joins two structures (fig. 704c). This would seem to indicate that the two buildings are contemporary or that the northern structure is the later, but I do not think our limited explorations allow any firm conclusion on this matter. One

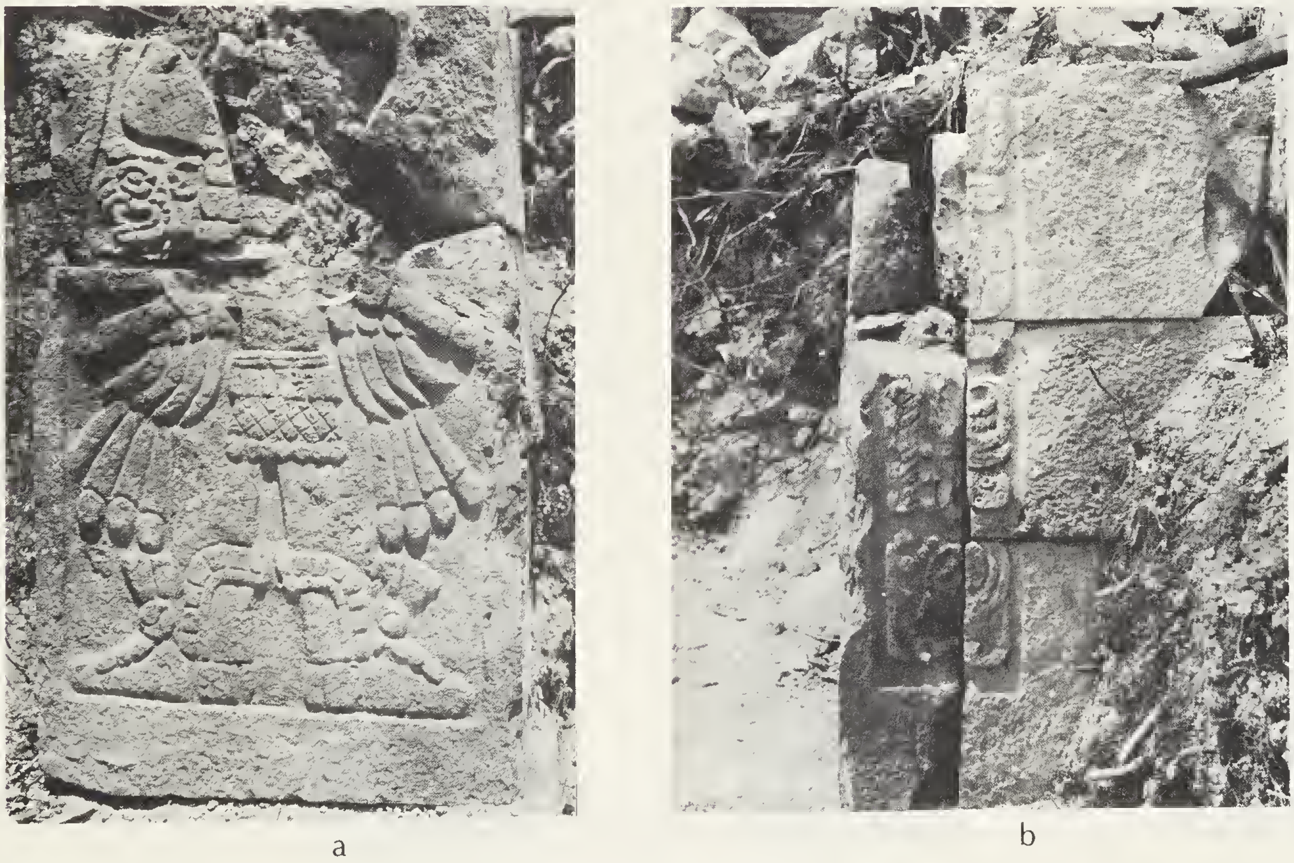
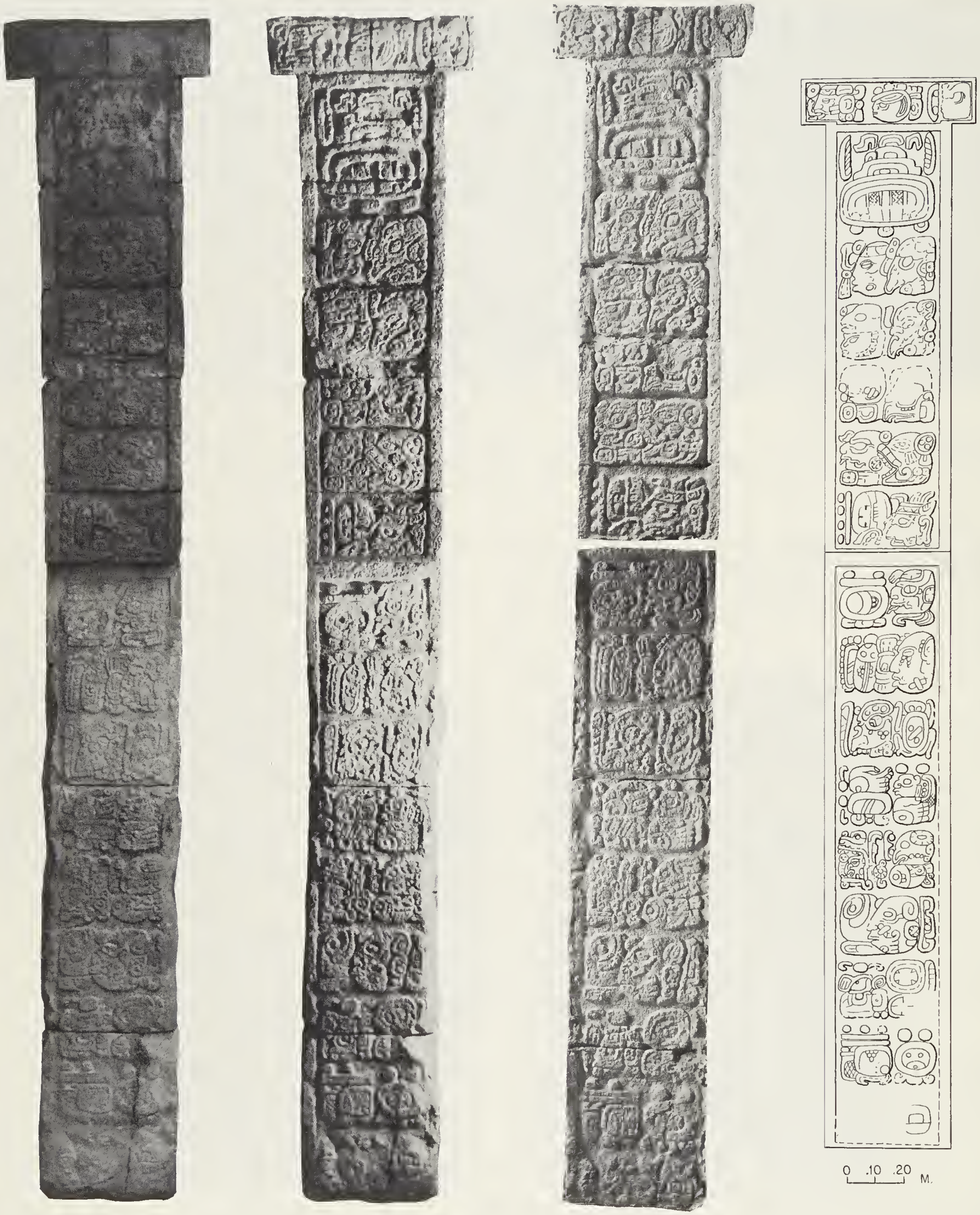


Figure 714. Xcalumkin, Initial Series Building. Remains of east jamb of entrance to east room: a, sculpture on face of jamb; b, sculpture on outer edge of jamb.



a b c d

Figure 715. Xcalumkin, Initial Series Building. Initial Series inscription: a, by daylight; b, by artificial light; c, cast in Peabody Museum, Harvard University; d, drawing.

also cannot be certain whether the buried room under the northern building is a burial vault contemporary with that building or is part of an earlier structure that once stood above ground.

SOUTH BUILDING

This three-room structure occupies the southern end of the Initial Series Court and faces north toward the Initial Series Building. Only the long front gallery is partly standing (fig. 716), the two rear rooms being fallen and buried beneath debris.

SUPERSTRUCTURE

Plan. See figure 703.

Sections. See figures 704a, 717.

Elevation. See figure 718. Partly restored.

Base Molding. Nowhere visible. Restored in section and elevation as simple rectangular molding in keeping with Initial Series Building and with great majority of base moldings observed at Xcalumkin.

Floor. Nowhere visible, but assume usual rise in level in rear rooms (fig. 717).

Walls. Front wall .57 m thick at doorjambs, medial wall .62 m at jambs, end walls .50–.60 m thick. No measure on wall between rear rooms.

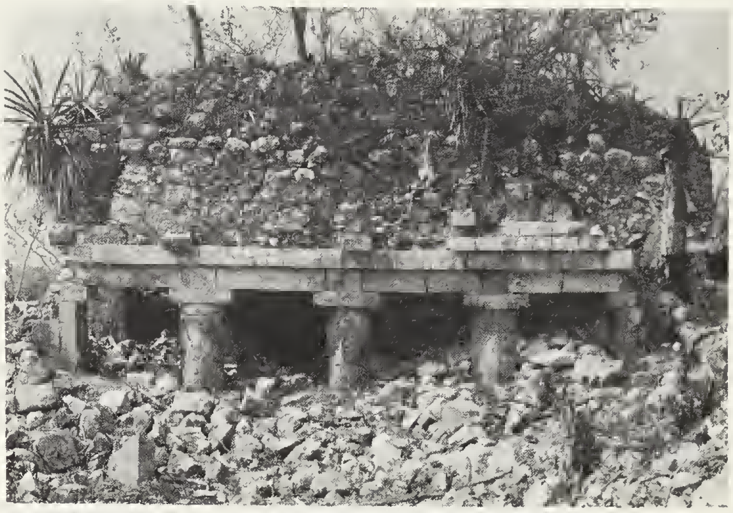


Figure 716. Xcalumkin, Initial Series Court, South Building. View of remains of north facade, looking south.

Very little wall showing except for rear wall of front gallery (fig. 719a). In keeping with usual Puuc practice, facing of this wall is of well-cut, well-dressed stone of outer facing variety. In general, wall facing probably like that of Initial Series Building.

Doorways. Entrance to front gallery unusual in employing three instead of conventional two columns (figs. 716, 718). Usual rectangular capitals on columns and

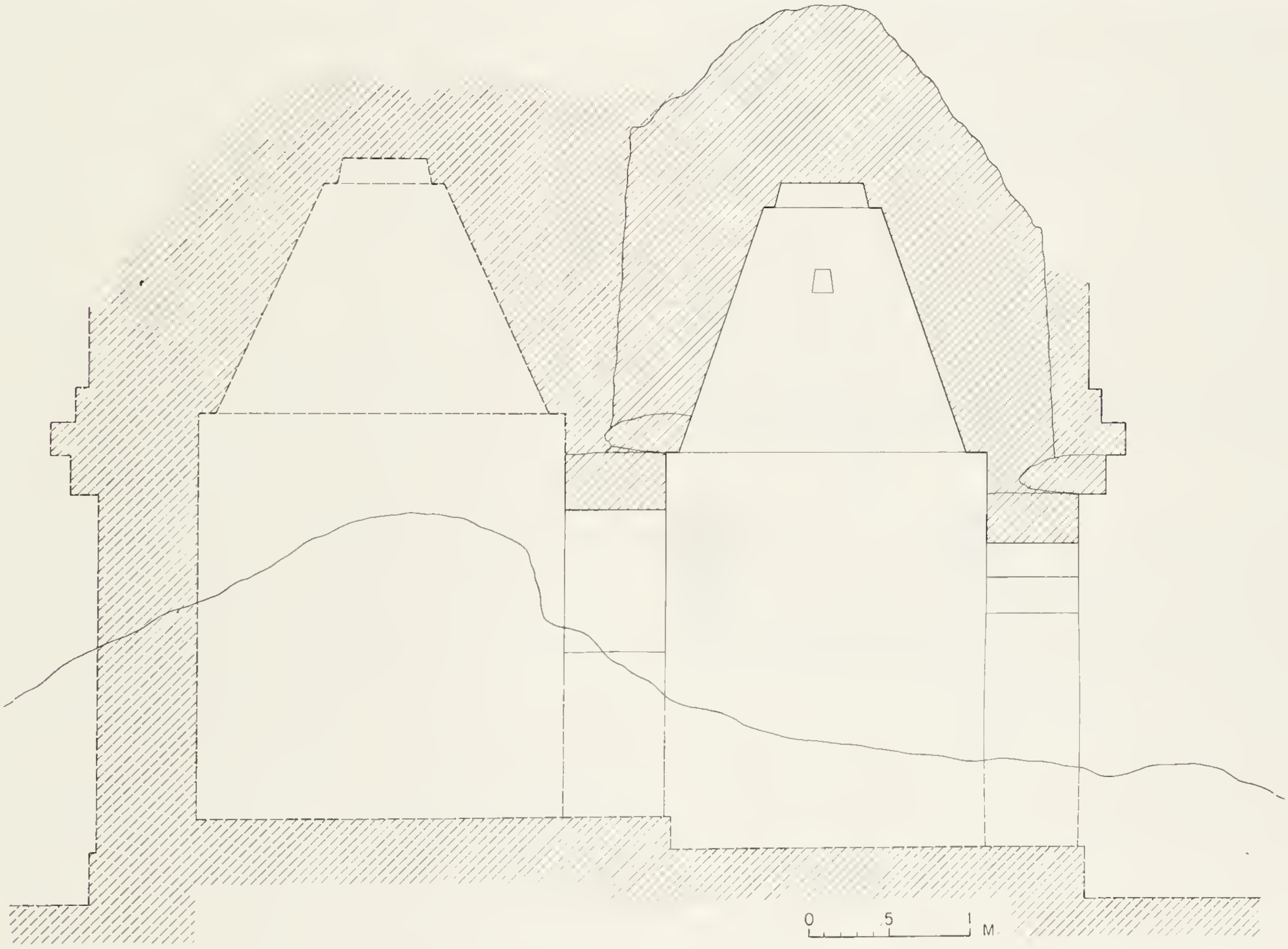


Figure 717. Xcalumkin, Initial Series Court, South Building. Section through east rear room and front gallery.

corbels on jambs. Columns truly round rather than flatly rounded on sides, as in Initial Series Building. Each column shaft seems to be single stone, except for east column which has small drum at top. All jambs of large, well-cut, full-width stones (fig. 717), and all lintels of well-cut and dressed stone (fig. 716).

Wall Depressions and Projections. Niche .19 m deep high on west end wall of front gallery (fig. 717). Also remains of niche and tenons on facade above front entrance (see Decoration, below).

Vaults and Beams. Only front vault is standing. Straight-sided rather than usual arched soffits (fig. 717). Vault stones well cut and dressed, a few somewhat specialized, and tend to be larger than those in Initial Series Building (fig. 719a). Capstones long, well cut and fitted, some relatively thick (.20 m). Constructional outer face of vault masonry, a typical Puuc feature, very plain here (fig. 716).

No beam sockets visible. May have been conventional large beams below spring of vault, but probably not.

Moldings. Medial molding of three rectangular members (figs. 716–718). No trace of cornice molding remaining.

Roof Structure. Debris on roof suggests building once carried roof comb.

Decoration. Fragment of facade masonry above western opening of main columnar entrance shows remains of niche above second member of medial molding (figs. 718, 719b). Well-cut stone tenon in niche and rough stone peg or tenon projecting from facade about 1 m farther west. These tenons presumably supported stone or stucco decoration. Niche lined with plaster carrying traces of red paint.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Badly fallen and considerably buried structure behind (south), and at lower level than, South Building (figs. 703, 704a). Range of possibly two rooms that seems to have faced south. Cannot determine sequence of building without excavation.

Northwest Building

This building lies a short distance northwest of the Initial Series Court. The structure, which is badly fallen, exhibits at least two additions, only one of which shows any considerable amount of standing masonry.

PLAN AND SECTIONS

See figures 720–722.

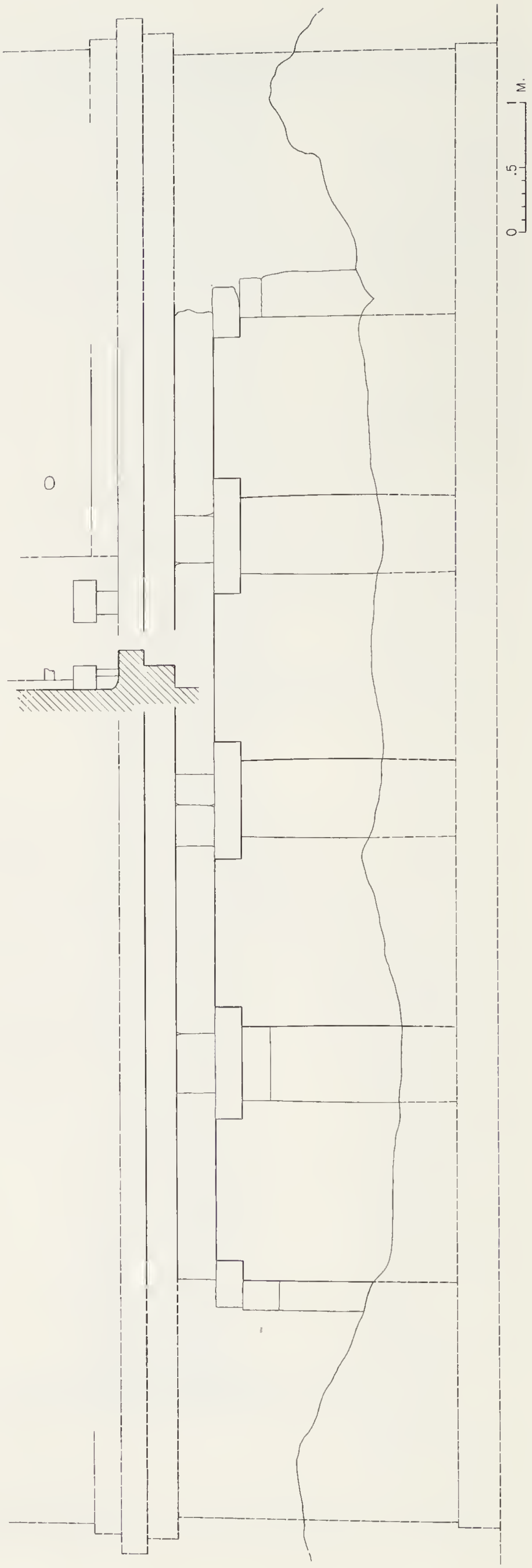
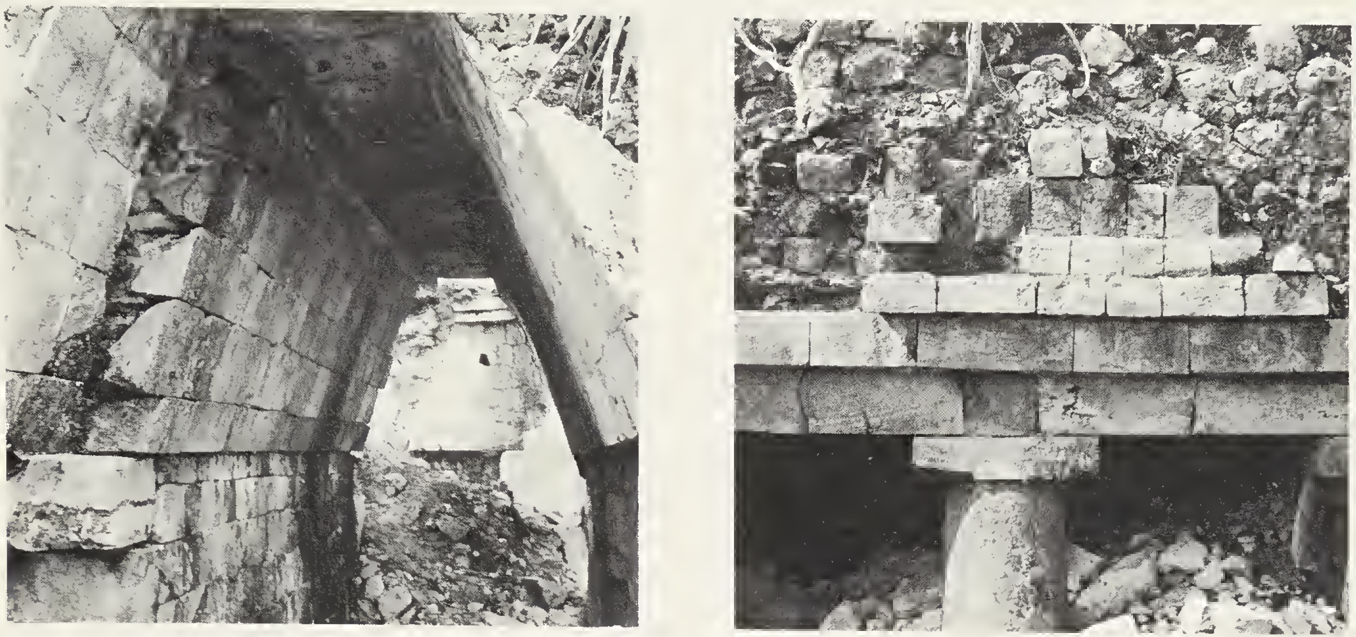


Figure 718. Xcalumkin, Initial Series Court, South Building. Partly restored elevation of north facade and detail of decoration over entrance.



a

b

Figure 719. Xcalumkin, Initial Series Court, South Building: a, north vault, looking west; b, west column of entrance and remains of decoration over molding.

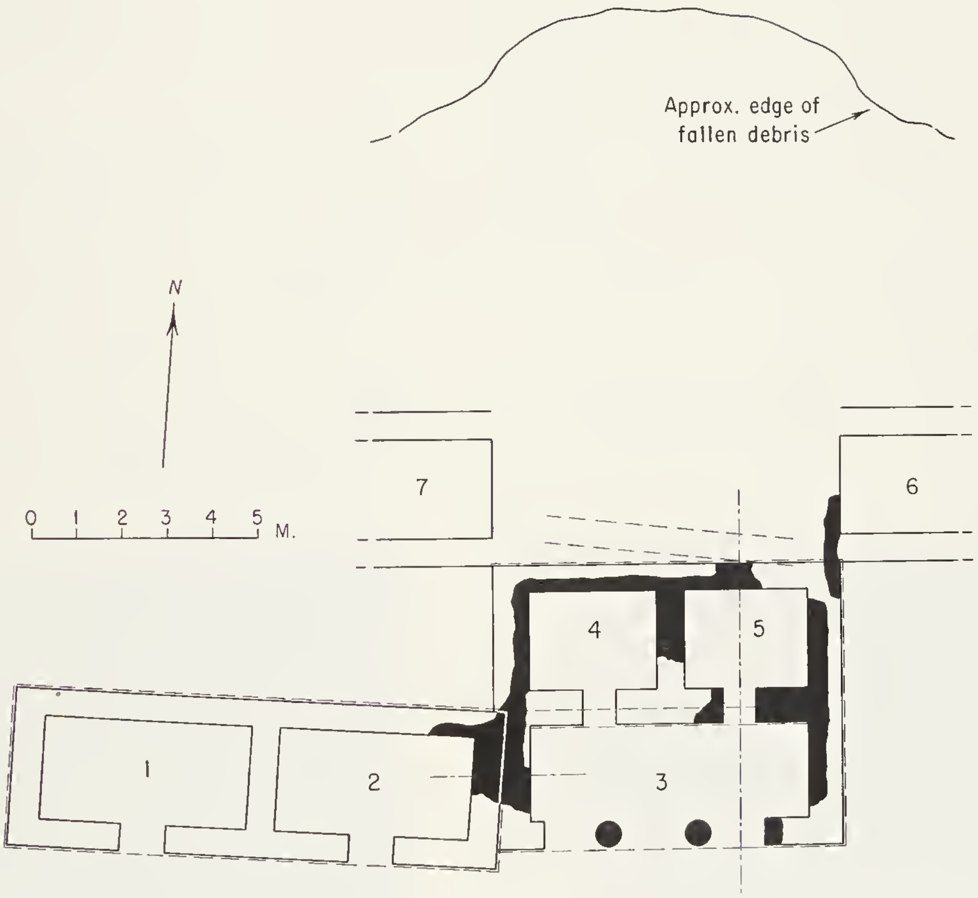


Figure 720. Xcalumkin, Main Group. Plan of Northwest Building.

CONSTRUCTION

Original Building (Rooms 1, 2) is almost totally fallen, only a fragment of the eastern wall showing any amount of masonry in place. The structure seems to have been a building of two rooms that faced south.

First Addition (Rooms 3–5) is only part of total structure at all well preserved (fig. 723). The three-room building with its columnar entrance carried a roof comb.

Second Addition is so fallen that no plan can be made out other than vaults (Rooms 6, 7) at northeast and northwest of First Addition. There may have been a second story, approached by a stairway at the north, that could represent a third addition.

SUPERSTRUCTURE

ORIGINAL BUILDING (Rooms 1, 2)

Plan. See figure 720.

Section. See figure 721.

Construction. Small rectangular base molding a single course of dressed stone .18 m high. East end wall of building, which is all that could be measured accurately, .62 m thick. Very little masonry showing but seems to be of small-stone variety (e.g., see pp. 452, 458). Upper facade, which overhangs lower wall at usual level of medial molding, carries slight batter (fig. 721). No remains of cornice molding. Superposition of Room 3 masonry against outer end wall of Room 2 clearly shows primary position of Original Building (Rooms 1, 2).

FIRST ADDITION (Rooms 3–5)

Plan. See figure 720.

Sections. See figures 721, 722.

Base Molding. Simple rectangular molding of single course of well-cut and dressed stone .27 m high.

Floor. None visible but assume level rose in rear rooms in usual manner.

Walls. Front wall .60 m thick at doorjamb, medial wall .79 m thick, rear wall .58 m, transverse wall between rear rooms .60 m thick. Heavy medial wall may be due to roof comb. Wall stone comparable to that used in Initial Series Building. Rear wall of front gallery (Room 3) faced with well-cut stone of quality used for outer wall facing.

Doorways. Typical columnar entrance with rectangular capitals on columns and corbels on jambs (fig. 723). Columns round and built of two drums each. Some drums have slight entasis but effort probably was for straight side. Jambs of well-cut and finished full-width stones, except for course of four small stones immediately below corbel (fig. 722). Jambs of doorways to Rooms 4 and 5 of wall stone and cornerstone variety (figs. 722, 724). All lintels of stone, the one over door to Room 5 made of two parallel stones.

Wall Projections. Ring-type cordholders in Rooms 4 and 5. Originally were four in each room, two at each end of room slightly below corbels under capstones (fig. 722).

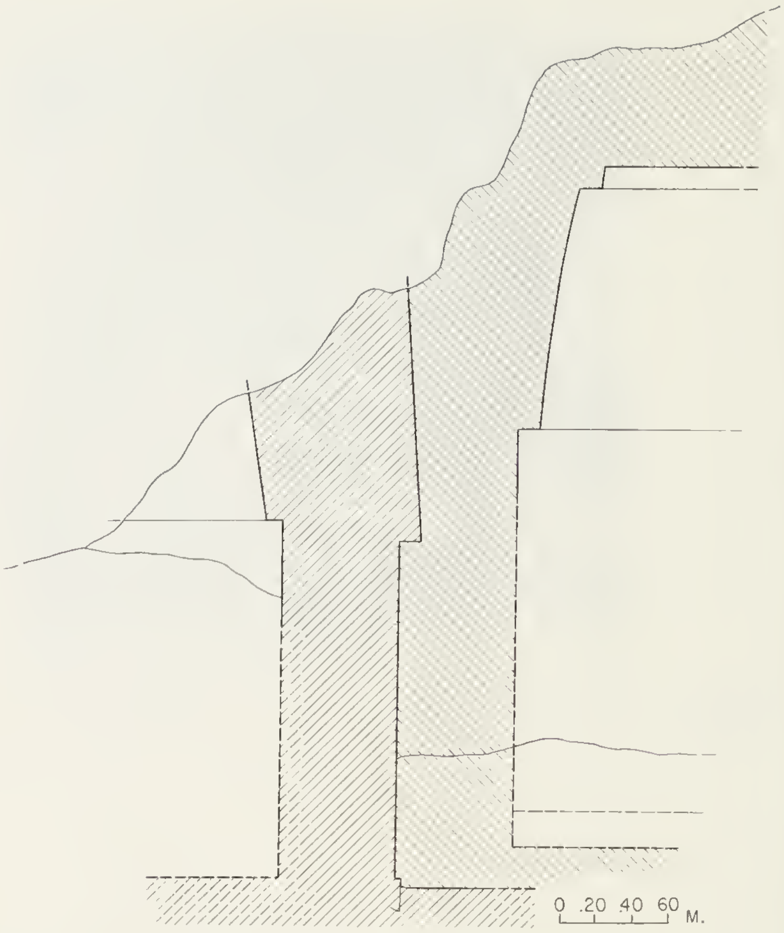


Figure 721. Xcalumkin, Main Group, Northwest Building. Section at junction of Original Building and First Addition (Rooms 2, 3).

Rings in Room 4 set horizontally in soffit, those in Room 5 vertically.

Vaults and Beams. Vaults relatively low in proportion to width (fig. 722). Wide capstones in front gallery. Design and masonry of vaults (fig. 724) very like Initial Series Building. Apparently no vault beams.

Moldings. Rather simple medial molding of three rectangular members (fig. 722). Cornice molding a single rectangular member above which is a relatively deeply-recessed vertical coping course.

North side of building buried and preserved by second addition (Rooms 6, 7, etc.). Facade carries heavy coat of plaster or stucco about .01 m thick on flat surfaces and .02–.03 m thick at inner angles (fig. 725). All corners are pronouncedly rounded, and the effect is of stucco modeling with soft flowing lines, rather than the sharp angularity of the cut-stone surfaces usually seen, and portrayed in nearly all of our illustrations. Figure 725 understates the rounded, modeled effect of the heavy plaster.

Roof Structure. Remains of perforated roof comb of rather simple design (figs. 722, 723). Seemingly only two or three windows. Faced with cut stone and built at same time as the roof and vaults below, there being no break in the masonry.

Decoration. Traces of red paint on moldings and on exterior wall surfaces where protected.

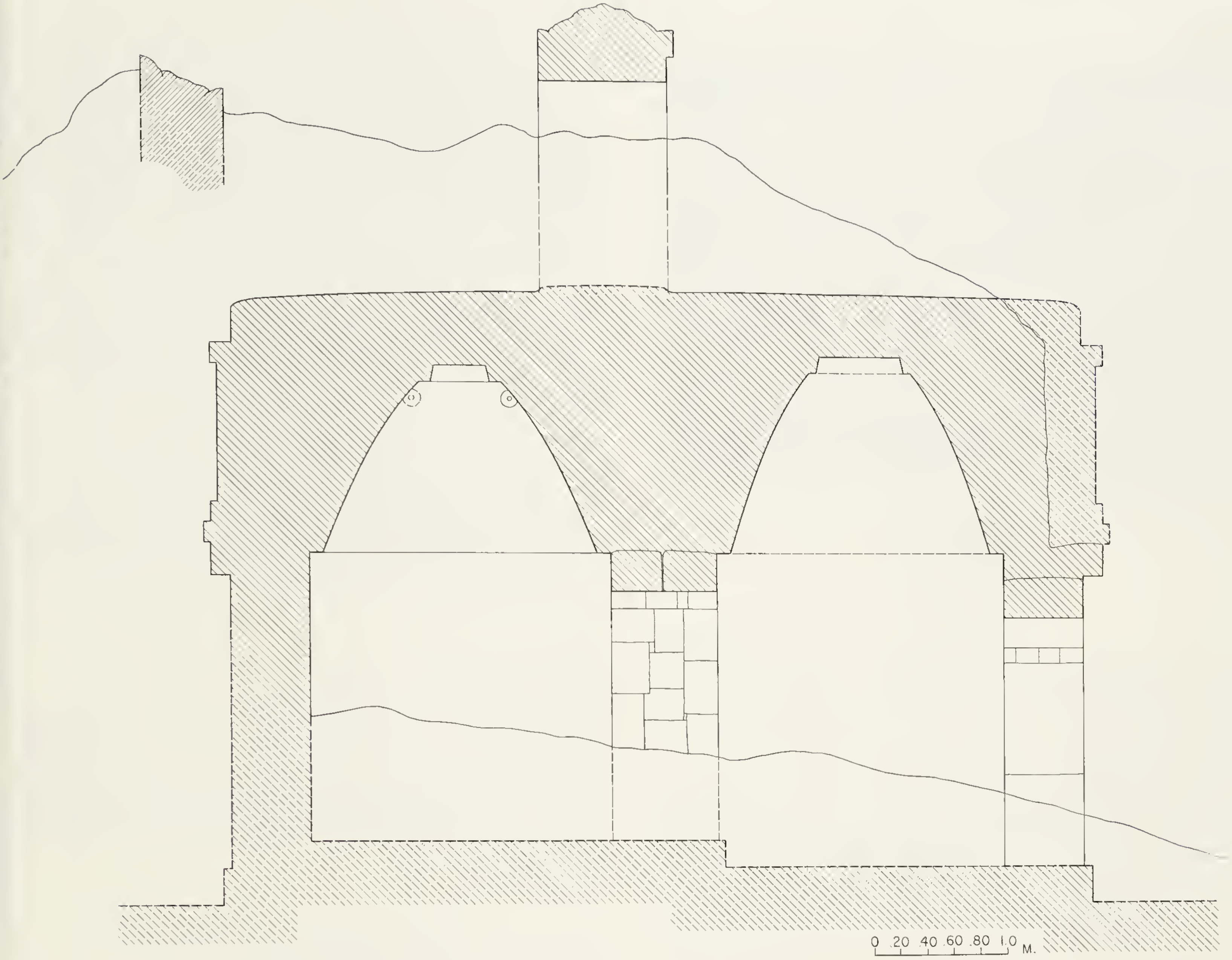


Figure 722. Xcalumkin, Main Group, Northwest Building. Section through Rooms 3 and 5.

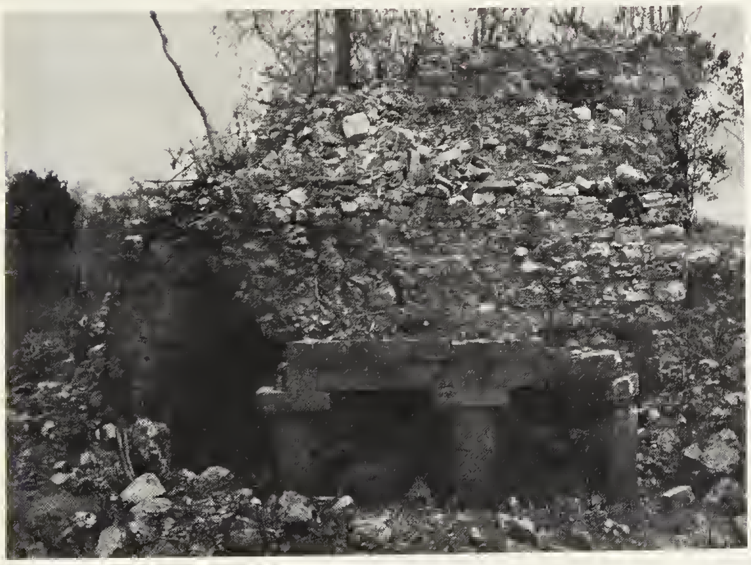


Figure 723. Xcalumkin, Main Group, Northwest Building, First Addition, looking north.

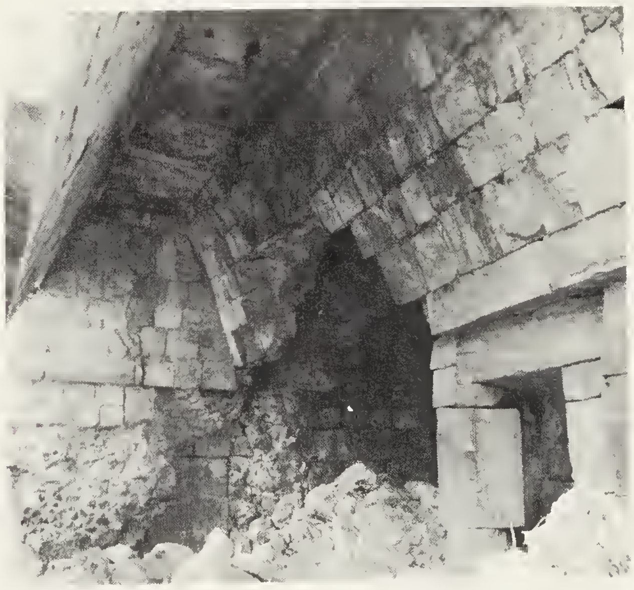


Figure 724. Xcalumkin, Main Group, Northwest Building. West end of Room 3 and doorway to Room 5, looking southwest.

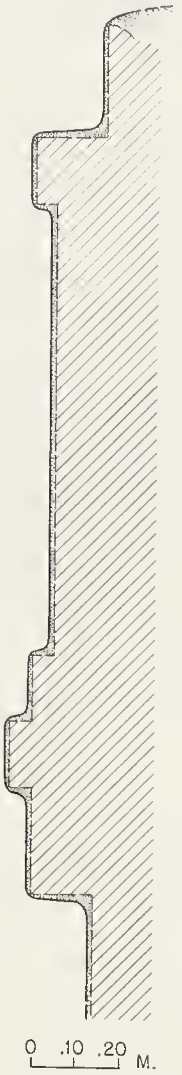


Figure 725. Xcalumkin, Main Group, Northwest Building. Profile of upper north facade of First Addition where plaster surface is preserved.

SECOND ADDITION (Rooms 6, 7, etc.)

Plan. See figure 720.

Construction. Only masonry visible is that at ends of vaults of Rooms 6 and 7 and fragment of wall on roof behind Rooms 4, 5. Character of masonry appears to be about the same as that of First Addition (Rooms 3–5). Fragmentary wall on roof, which probably rests on solid fill, may represent roof comb but more likely is from second-story room. Building debris stretches some 11–12 m north of wall and strongly suggests stairway to second story. Any second-story construction could be of same period as Second Addition or could represent a third addition.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Successive stages of building as outlined above are quite clear. The only question pertains to a problematical second story that might belong to the third stage of construction or might represent a fourth stage.

North Building

This badly fallen structure lies north of the Initial Series Court. I have no plan of the building, but my notes imply there had been a rear range of rooms. The main surviving architectural features are an unusual multiple-entrance doorway and the fragmentary remains of the vault inside the doorway.

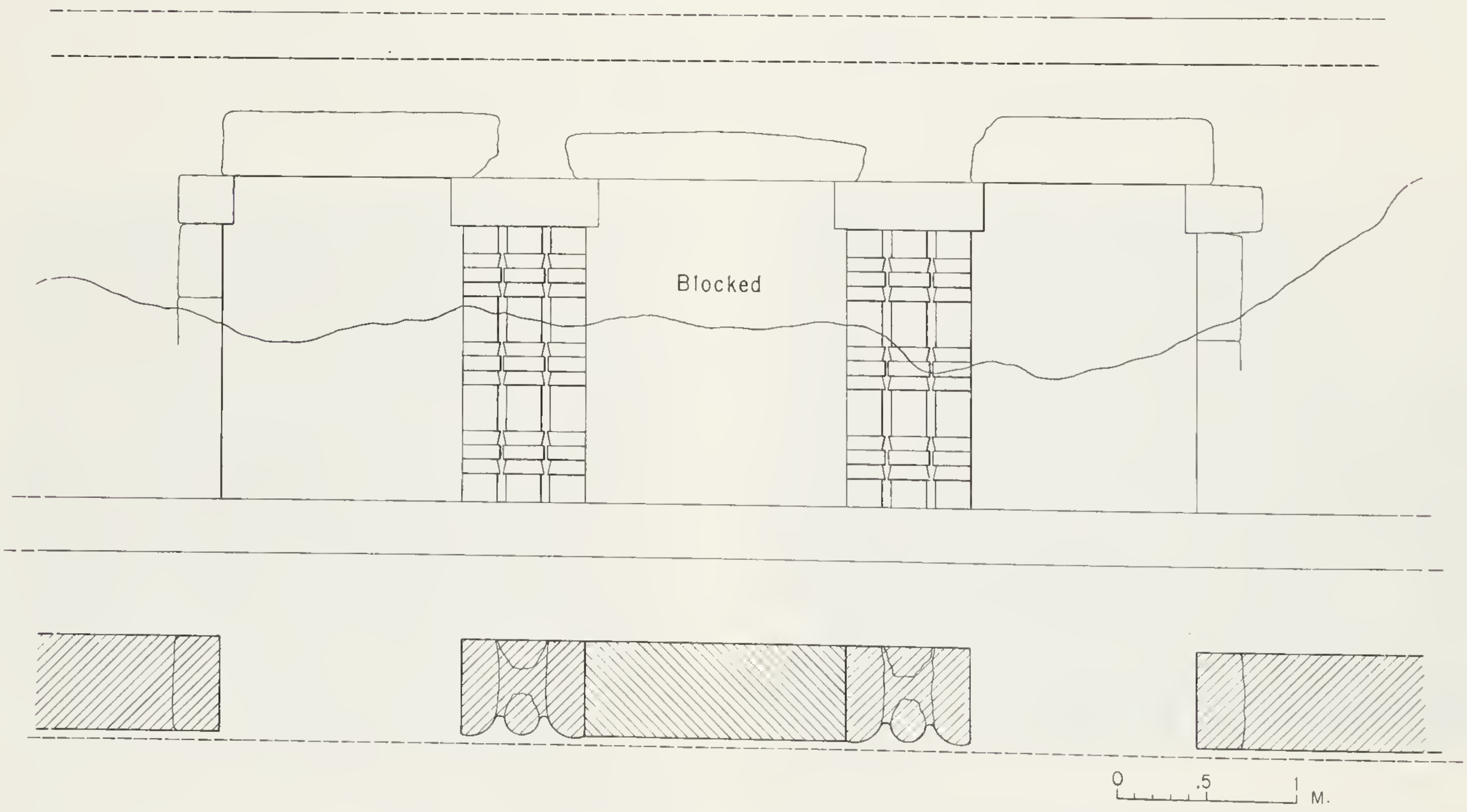


Figure 726. Xcalumkin, Main Group, North Building. Restored elevation and plan of main entrance.

SUPERSTRUCTURE

Base Molding and Floor. None visible.

Walls. Thin front wall only .54 m thick at doorjambs. Outer wall facing of well-cut and dressed stone (fig. 728). Rear wall of front room faced with stone of same quality, a practice that implies rear chamber was entered from that room.

Doorways. Main doorway to building employs two unusual piers to form a triple entrance, the central opening of which was secondarily blocked by masonry (figs. 726, 728). Each pier is made of two jambs, the front edges of which are carved to simulate banded split columns, and a banded split column between the jamb stones. The piers support rectangular capitals and the plain jambs at the outer sides of the multiple entrances carry corbels. Each opening is spanned by a heavy well-cut stone lintel.

Vault. Enough remains of front vault to show it was very low in proportion to width and carried tremendously long capstones that spanned an interval of .86 m (fig. 727). Vault stone fairly large, well cut and dressed, and some quite specialized.

Moldings. Medial molding a simple string course above which facade rises vertically. No cornice molding standing.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Blocked central opening of multiple entrance is only secondary construction noted.

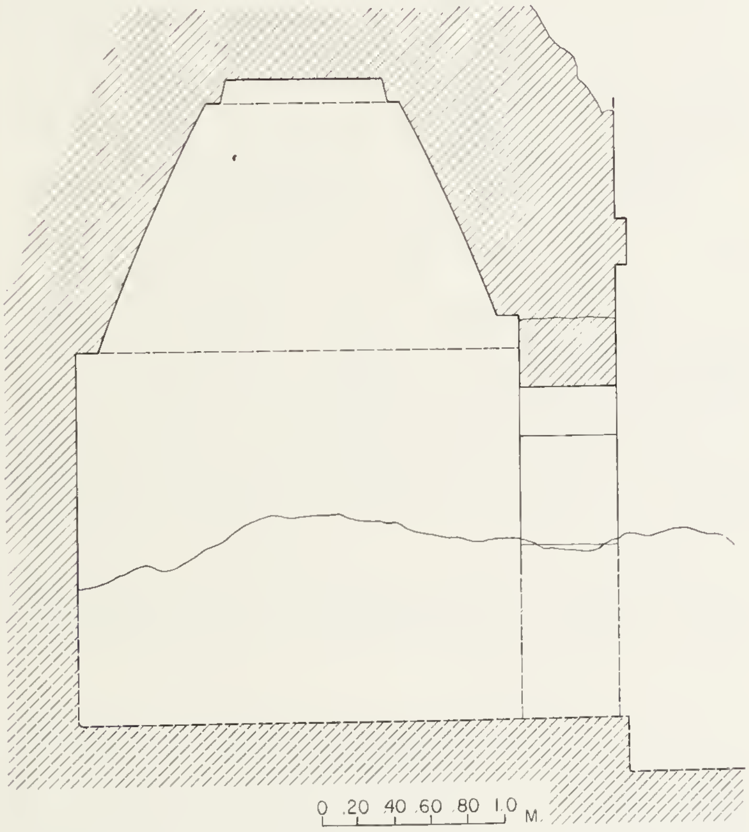


Figure 727. Xcalumkin, Main Group, North Building. Transverse section through front room.

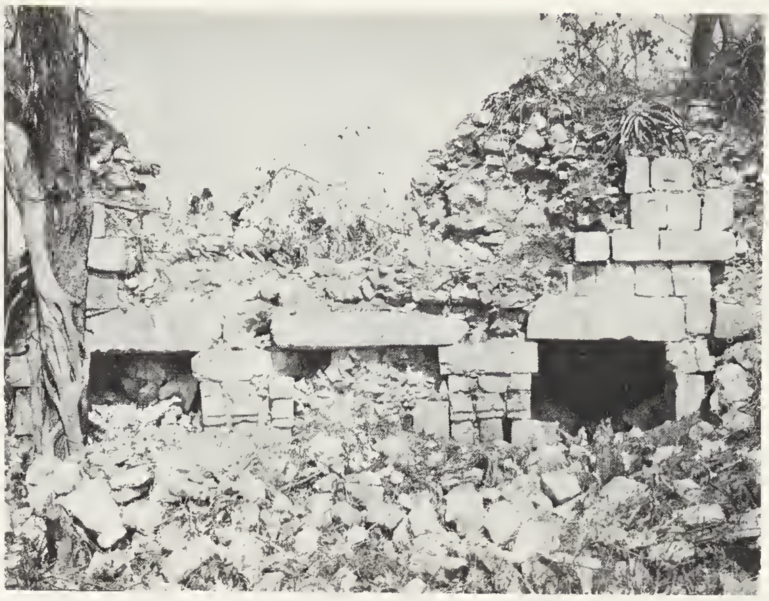


Figure 728. Xcalumkin, Main Group, North Building. Remains of main entrance.

Nunnery

At the time of our work at Xcalumkin this structure was known to the local inhabitants as the Casa de las Monjas, or Nunnery. My notes are not clear as to its location, but I think it lies just north of the Main Group. The building faces south, on which side a stairway rises over a passage spanned by a half vault. Nearly all of the main southern facade has fallen (fig. 729a), but to judge from the remaining masonry and the general design of the structure, the building is typical of the eastern Puuc ruins.

SUPERSTRUCTURE

Construction. Passage beneath staircase relatively wide with fairly large capstones resting at top of half vault and on first course of medial molding (fig. 729b). Front wall .60 m thick at doorjambs. Large, finely cut, faced, and fitted stone in facing of outer wall; facing of inner wall much cruder. Finely cut and finished stone doorjambs and lintels. Each jamb formed of one or two stones, each stone covering full thickness of wall. Vaults are large and built of finely cut and dressed, rather specialized stone (fig. 729b). Usual large beam sockets at each end of room just below spring of vault, and six small sockets below corbels under capstones in each room. First course of medial molding is well-cut apron member. No other member standing. Stairway presumably was to lead to second story that was never built.

Decoration. Traces of painting on rear wall of center room. Small patches of red and green and possibly blue paint remain. Entire wall may have been covered. Seemingly a red band below spring of vault that continued as stripe down rear corners of room. Possibly a red dado across bottom of wall so that scene was framed by red band. Impossible to gain any idea of subject of painting.

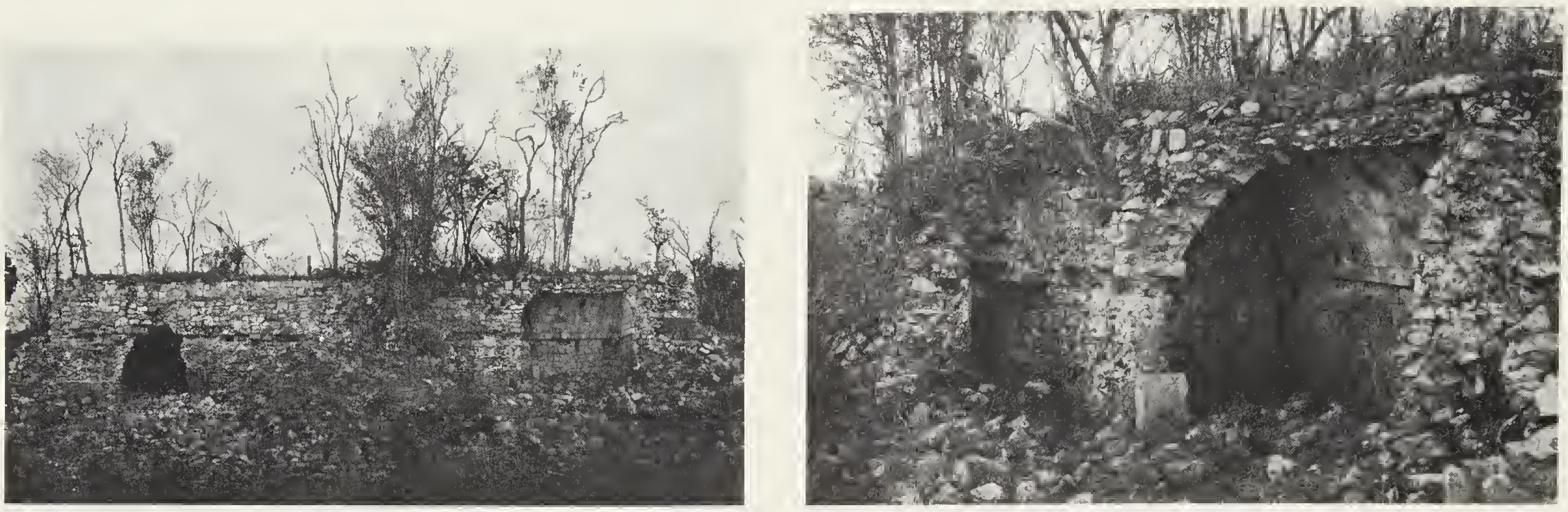

a
b

Figure 729. Xcalumkin, Nunnery. a, view from south; b, view from southeast, showing passage under stairway and section of vault.

NORTH HILL GROUP

Group of buildings around a small courtyard on top of a hill 15–20 m high and some 200 m or more north and slightly west of the Initial Series Court (fig. 701). No very obvious primary approach to the group is indicated, but it may have been from the south-southwest, in which direction the southernmost building faces (fig. 730).

Although there clearly was considerable artificial leveling, I have no information on the substructural terracing underlying the group. In the central courtyard is a chultun that seems to have had its own raised drainage platform.

A small stone sculpture, M1, was found in this group (see Miscellaneous Sculpture, below).

South Building

This is the only structure in the group sufficiently well preserved to offer any amount of architectural detail.

SUPERSTRUCTURE

Plan. See figure 731.

Section. See figure 732.

Base Molding. Simple projecting course of well-cut and faced stone .31 m high, of which .28 m showed above floor level (fig. 732a).

Stairway. Stairway rises to roof level, apparently to serve a second story that was never built. All steps either fallen or buried. Passageway beneath stairway, providing access to center room, spanned by three-quarter vault (fig. 733) and relatively wide for such passages.

Walls. Front wall .54 m thick tapering to .47–.48 m at doorjambs of center and west rooms. Jambs of east room .54 m. Rear wall about .70 m thick, end walls about .65 m, transverse inner walls .85–.90 m.

Outer wall facing of well-cut and dressed stone of average quality (fig. 733). Wall facing in east and west rooms, and on south wall of passageway under stairs less well finished than outer facing and also of average quality. Walls of center room employ better faced stone than in other rooms but stone is smaller, more irregular in size, and less well fitted than outer wall facing.

Usual building level one course below spring of vault not clearly marked. May be present, but questionable, and no recession of course below spring.

Doorways. Slight widening from top to bottom as is common in Puuc building. Center doorway 1.50 m wide at top, 1.55 m at bottom; east doorway .91 m at top, 1 m at bottom. Well-cut jamb stones run full width of wall, two or three stones to each jamb (fig. 733). Heavy, well-cut and finished stone lintels .37 m thick.

Wall Depressions. Pair of cordholders of one-tongue-at-corner variety inside center room at each side of doorway.

Vaults and Beams. Vaults normal with well-cut, faced, and fitted stone and large well-cut capstones (fig. 733). Only slight curve to soffits.

Usual pair of large beam sockets at each end of room just below spring of vault, and pair of small beam sockets at each end of room below or in corbeled course below capstones (fig. 732).

Moldings. Only first course of medial molding, a rectangular member, still standing (figs. 732b, 733). No cornice molding remaining.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Rear wall (north) of South Building seems to have been faced with cut stone to height of medial molding, but molding apparently never built and wall above molding never faced. Best guess is that South Building was started before court to north of it was built, but that construction later

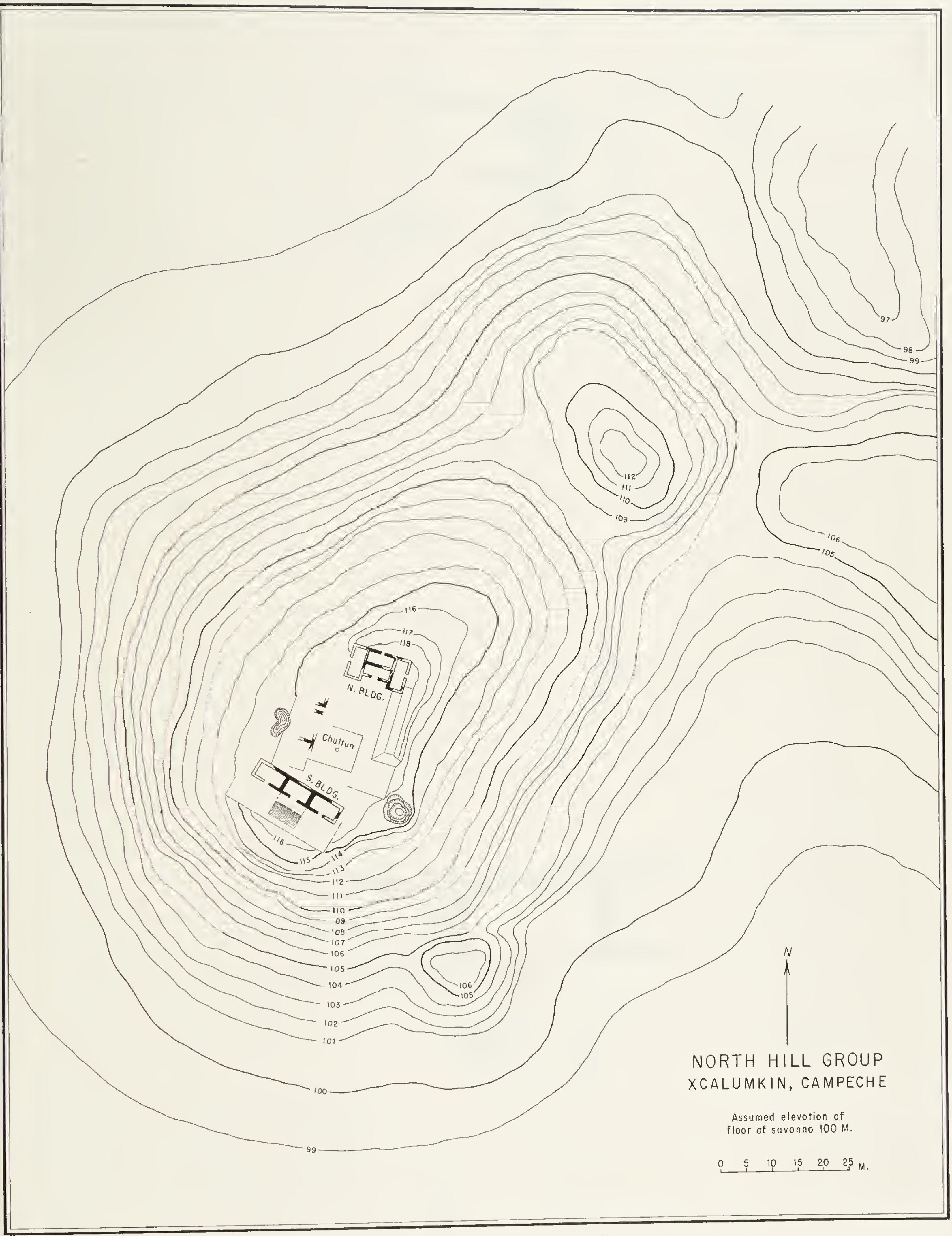


Figure 730. Xcalumkin. Map of North Hill Group.

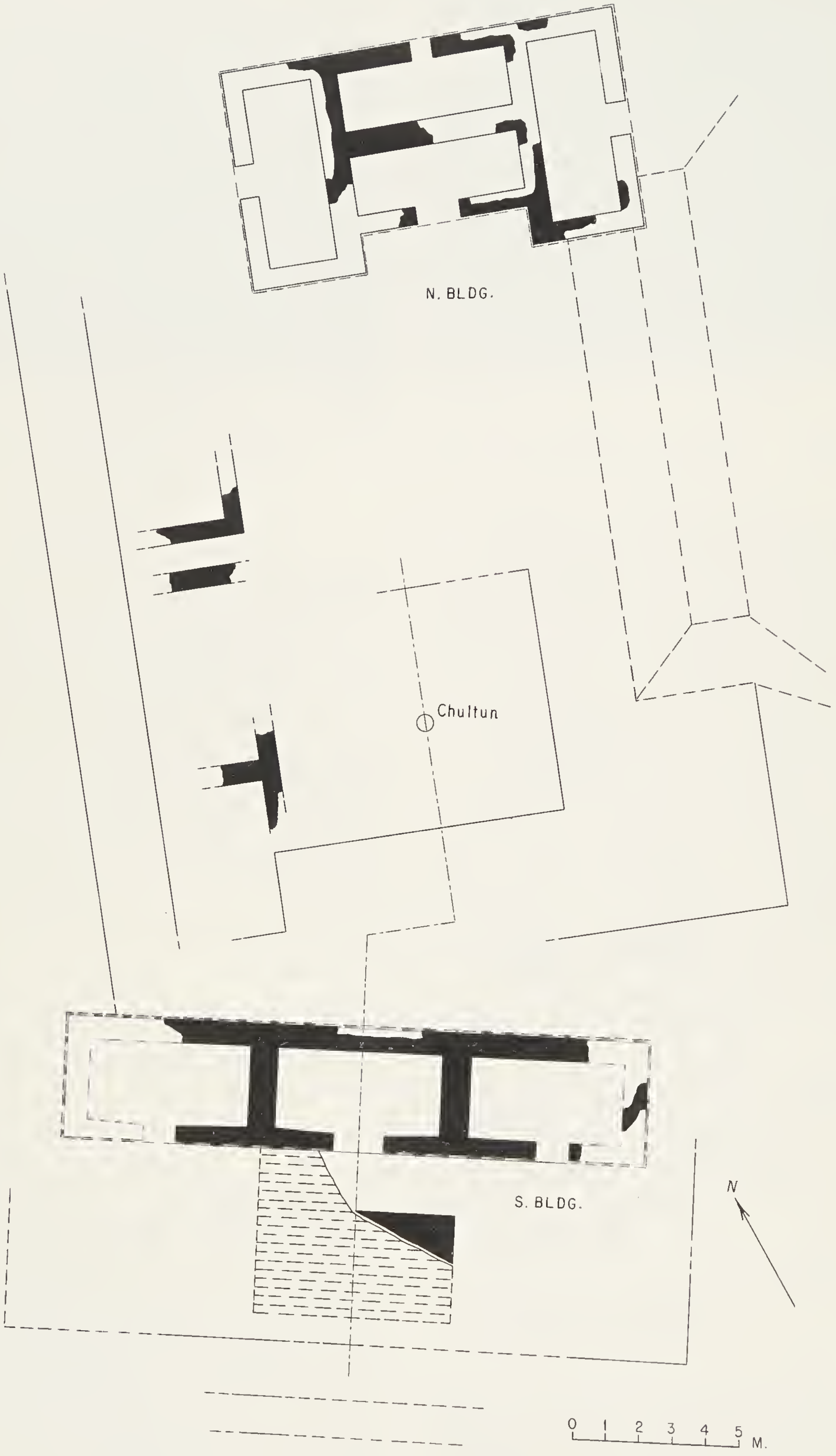


Figure 731. Xcalumkin. Plan of North Hill Group.

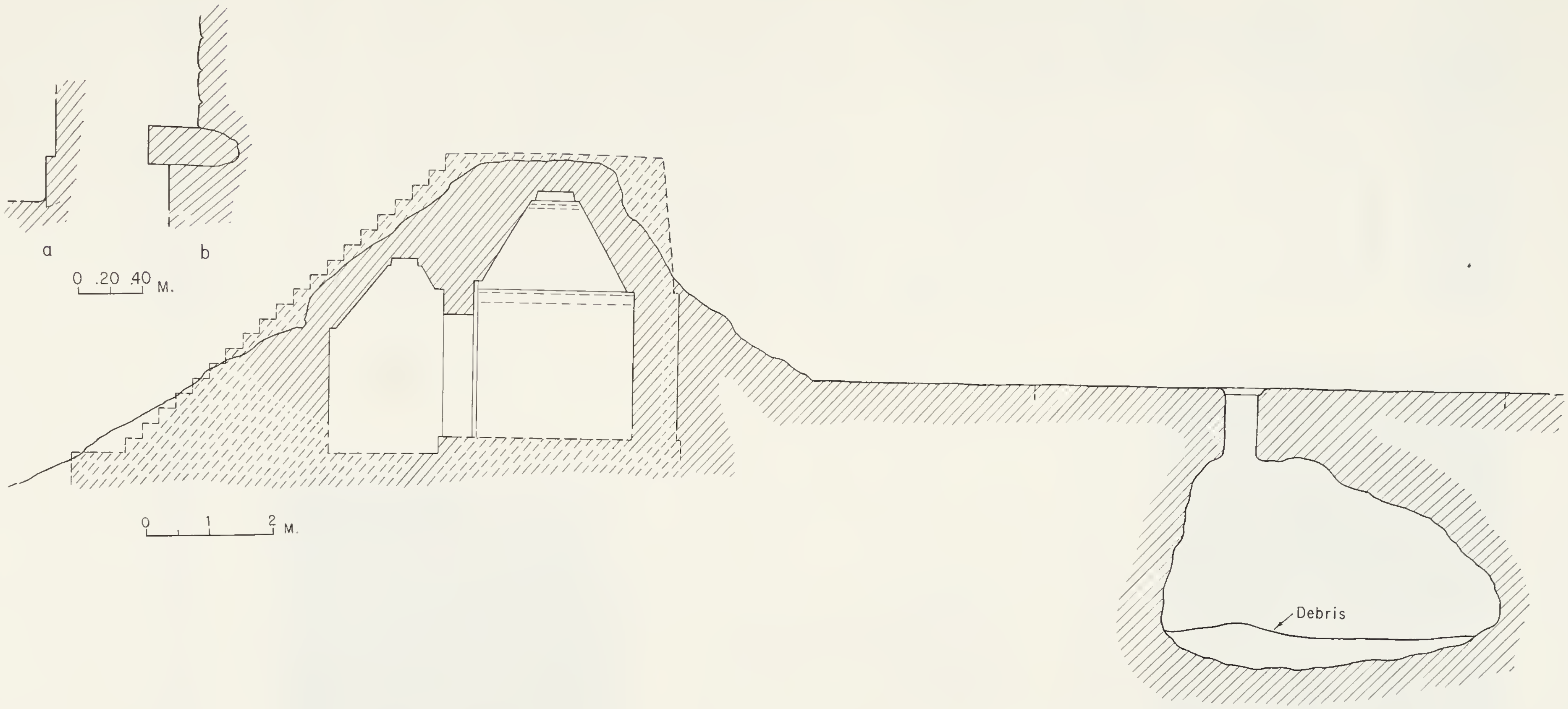


Figure 732. Xcalumkin, North Hill Group, South Building. Section through stairway, center room, and chultun in court: a, detail section of base molding; b, detail section of medial molding.

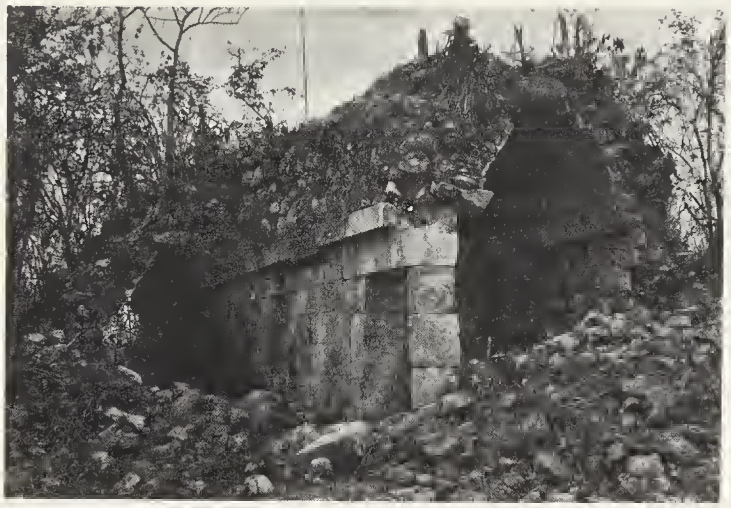
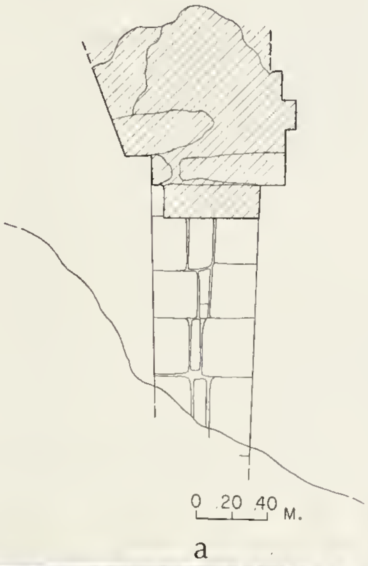
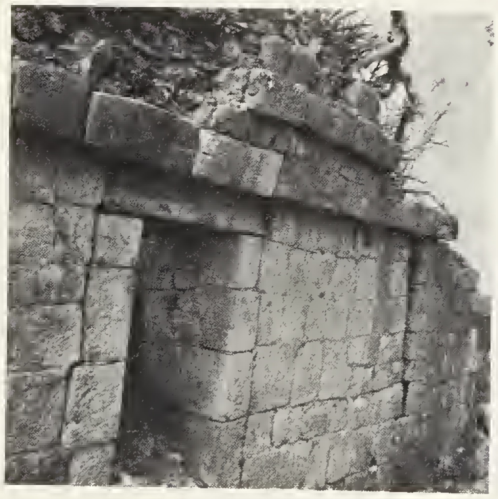


Figure 733. Xcalumkin, North Hill Group, South Building. View from southeast, showing passage under stairway, doorway to east room, and vault of east room.





b

Figure 734. Xcalumkin, North Hill Group, North Building: a, section through north doorway; b, north wall, looking southwest, and showing doorway and remains of medial molding.

proceeded more or less contemporaneously. Higher rear range of rooms, a second story for the South Building, that would have been approached by the stairway at the front of that building, seemingly planned but never built.

North Building

Badly fallen, four-room building at north end of, and facing on, inner courtyard of group (fig. 730). Only architectural detail is offered by still-standing fragment of northern wall.

SUPERSTRUCTURE

Plan. See figure 731.

Construction. Outer and inner wall stone fairly well faced and fitted (fig. 734b). Stone tends to be smaller than usual. Wall tapers in thickness from top to bottom at jamb of only standing doorway (fig. 734a). Jamb .54 m wide at line of debris, .61 m at lintel. Jambs built of two columns of cornerstones with small stone between. Stone lintel. Medial molding probably of three rectangular members, but may have been of only two members if the top member shown in figure 734 were the beginning of the upper facade.

HIEROGLYPHIC GROUP

Some 400–500 m south of the Main Group at Xcalumkin is a moderate-sized group of structures that I have called the Hieroglyphic Group because of the very considerable amount of glyphic sculpture found there. The group is built over low limestone outcrops in the savanna, similar in this respect to the Main Group, and seems to be arranged about a northern and a southern court (fig. 735). The buildings are badly fallen, and had it not been for some sculptured stones visible above ground that led us to undertake limited excavations, the group would have been passed by with notes on only the few observable architectural features.

In the northern court are two small limestone sinks, presumably the remains of caved-in chultuns, and the opening to a still-intact chultun. No such cisterns were observed in the south court but they are very probably there.

Sculpture M4 was found in the South Building of this group (see Miscellaneous Sculpture, below).

Northwest Building

Badly fallen, L-shaped structure consisting of a northern wing of three rooms and a southern wing that apparently contained six rooms.

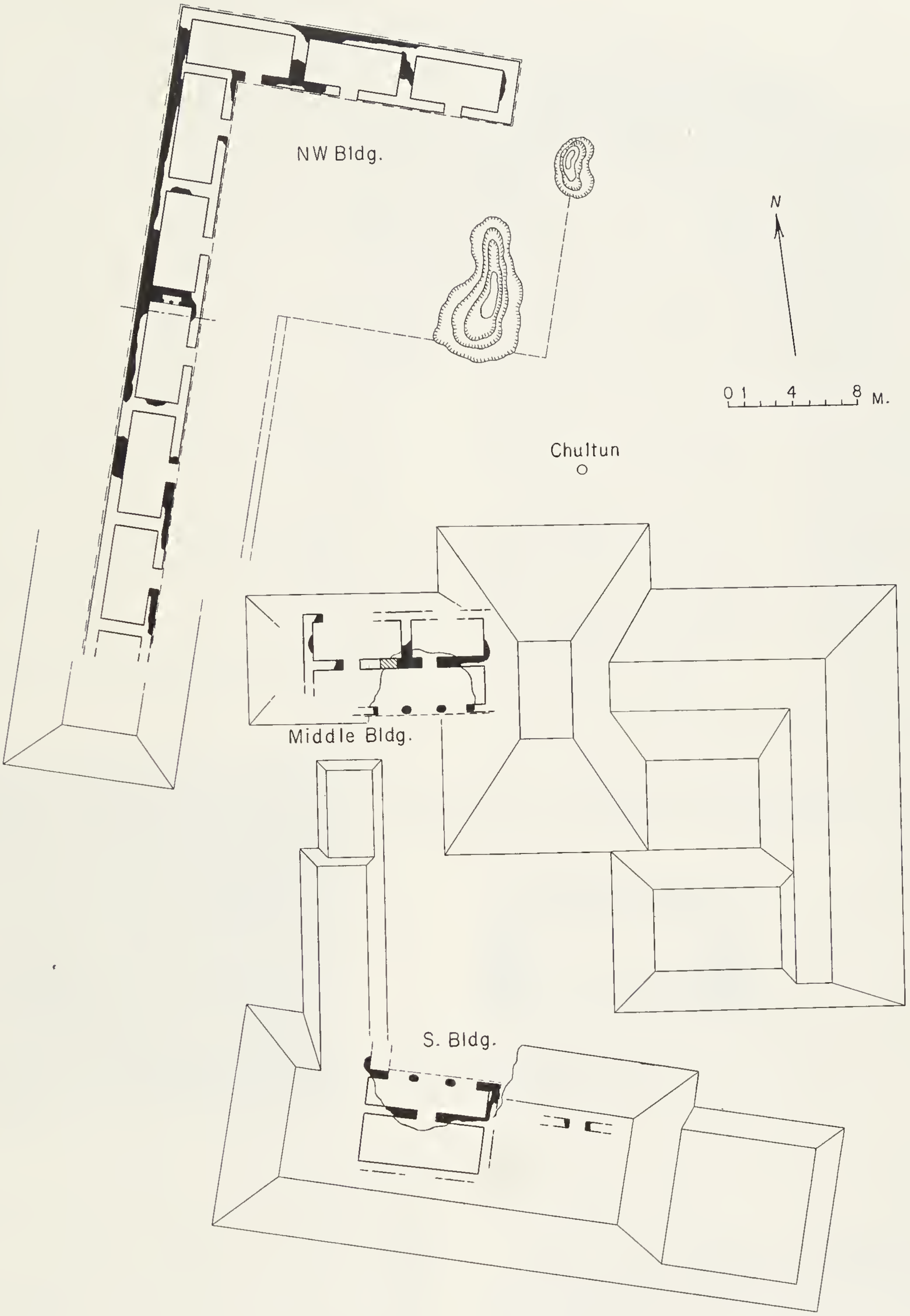


Figure 735. Xcalumkin. Plan of Hieroglyphic Group.

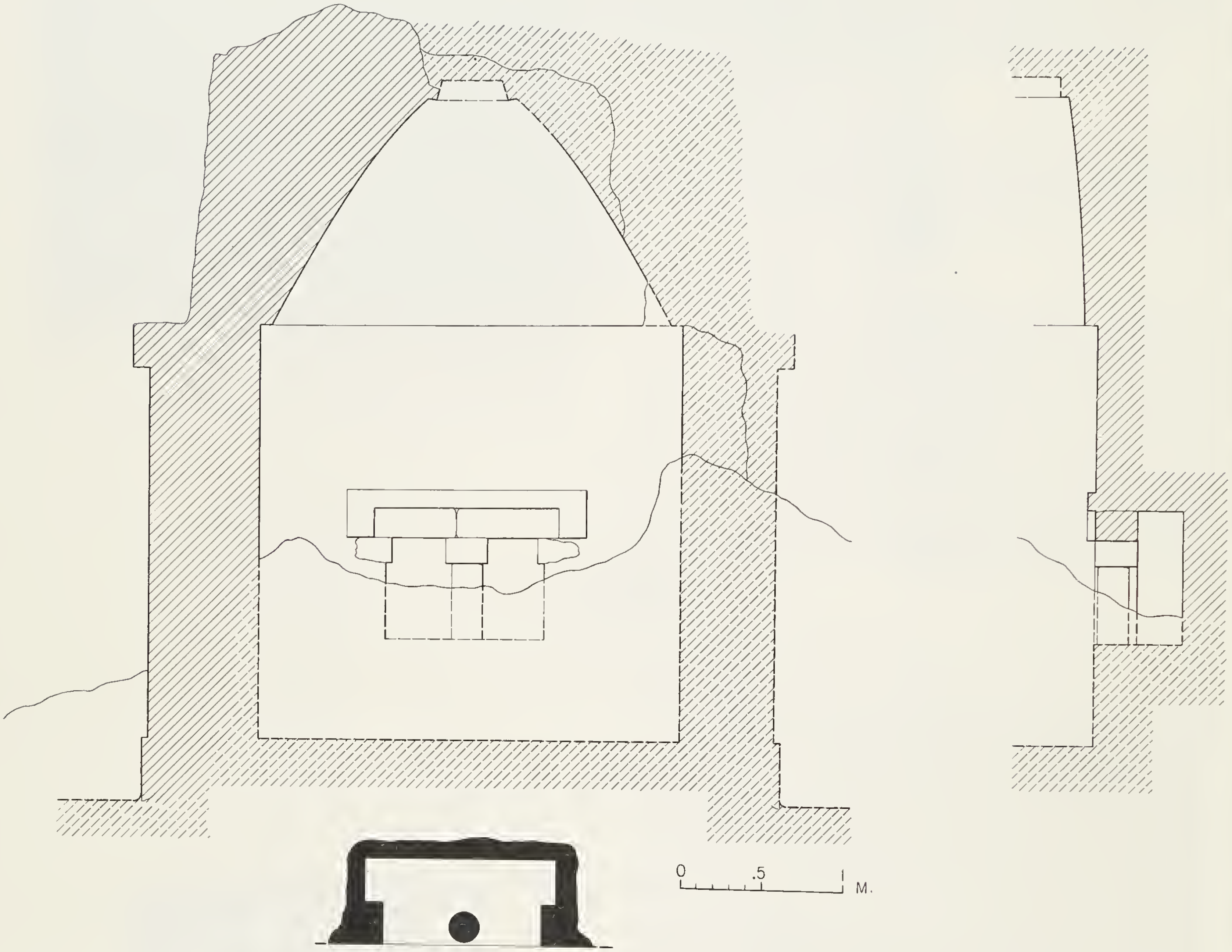


Figure 736. Xcalumkin, Hieroglyphic Group, Northwest Building. Transverse section through fourth room from south, plan of niche in end wall, and section through end wall.

SUPERSTRUCTURE

Plan. See figure 735.

Section. See figure 736.

Construction. Simple rectangular base molding on south wing (fig. 736). Three-member base molding with triple colonnettes alternating with step-and-fret design in middle member on north wing (fig. 737; and cf. fig. 670). This is the only complex base molding observed at Xcalumkin, all others being a simple projecting course of stone. Front walls of both wings about .57 m thick at doorjambs, rear wall of south wing about .67 m thick, transverse walls between rooms about .90 m thick. I have no notes on wall masonry, and none on doorways. Elaborate niche in north wall of third room from north in south wing (figs. 735, 736). Tiny column with capital, corbels on jambs, little lintels, and rectangular molding above imitate doorway to building. Only first course of medial molding, a rectangular member, remains on rear wall of south wing (fig. 736); three-member medial molding with plain wall above on rear of north wing (fig. 737). Reused sculptured stone (fig. 738) in front (east) wall of south wing, and trace of light blue paint high on vault in room with niche in that wing. I have no notes on the masonry at the juncture of the north and south wings. The different moldings, both base and medial, suggest the two wings are not contemporaneous.

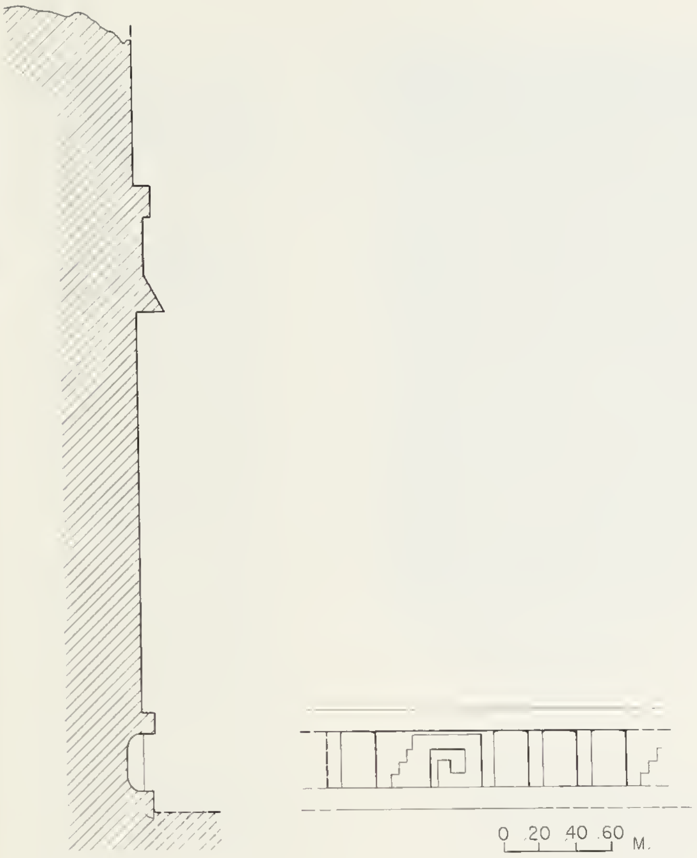


Figure 737. Xcalumkin, Hieroglyphic Group, Northwest Building. Profile of north facade and elevation of base molding.

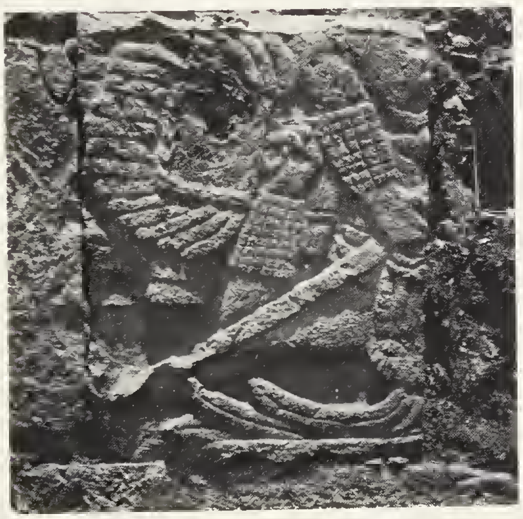


Figure 738. Xcalumkin, Hieroglyphic Group, Northwest Building. Sculptured stone in east wall of south wing.

Middle Building

(North Building)

Almost completely buried beneath debris prior to our limited excavations, this structure seems to have faced on both the north and the south courts. Judging from the elaborately decorated southern doorway uncovered by our digging, the primary approach to the building was probably from the south court, but that is by no means certain.

SUPERSTRUCTURE

Plan. See figure 735.

Base Molding. Not uncovered.

Floor. Small patches of floor show usual buff color.

Walls. North and south walls .49 m thick at doorjambs, medial wall .60 m thick at jambs, inner transverse wall approximately .60 m thick. Portion of rear wall of south room only wall surface seen. Moderately well-faced and fitted stone, but rather small, averaging about .25 × .25 m, and very irregular in size (fig. 743a).

Doorways. Columnar doorway at south with elliptical columns (fig. 708b) supporting rectangular capitals, full-width jamb stones carrying corbels, and stone lintels. East column .60 m wide and .48 m thick, west column .54 m wide and .47 m thick. In recent years these columns have been moved to the regional archaeological museum in Hecelchakan (see p. 502). Faces of columns, jambs, and corbels sculptured (see Decoration, below). Jambs of doorway in medial wall behind columnar entrance built of both full-width stone and of wall and cornerstones. Large stone lintel (fig. 743a). Lowest stone of west jamb of west doorway in north wall is sculptured, full-width stone (see Decoration, below). Secondarily blocked doorway in medial wall.

Vaults. Vault stone in debris well cut and dressed, mostly of block, triangular, or slightly specialized shapes, but a few highly specialized.

Moldings. First course of medial molding may have been slightly beveled apron member .20 m high, but not certain.

Decoration. Columns in south doorway carry low-relief sculpture of hieroglyphs on outer faces (figs. 739a, 740). Jambs of same entrance sculptured with elaborately costumed human figures (fig. 741; and see Proskouriakoff 1950, fig. 94f, g), above which are corbels with hieroglyphs (fig. 742a, b). Fragment of jamb of doorway in north wall carved with legs of similar human figure and several small glyphs (fig. 742c; and ibid., fig. 94e). South face of east doorway in medial wall is bordered by low-relief band of hieroglyphs terminating at each end with grotesque head or mask (fig. 743). See Proskouriakoff 1950 (p. 166) for discussion of sculpture on jambs and for suggested date of 9.17.0.0.0 (A.D. 771).

Traces of red paint were observed on the corbel above the western jamb of the columnar doorway and on the band of glyphs around the doorway in the medial wall. Trace of green paint on eastern grotesque head that terminates band of glyphs.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Only secondary construction seen is blocking of doorway in medial wall, but too little of structure visible to gain any knowledge of building sequence.

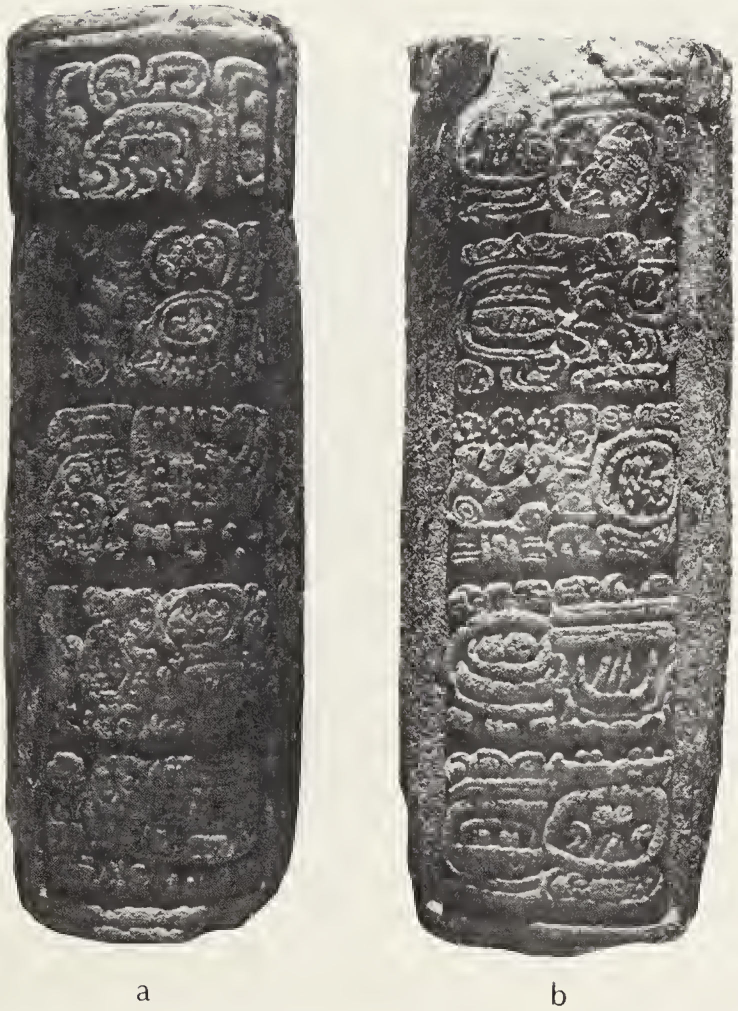


Figure 740. Xcalumkin, Hieroglyphic Group, Middle Building. Sculptured columns from south doorway: a, west column; b, east column.

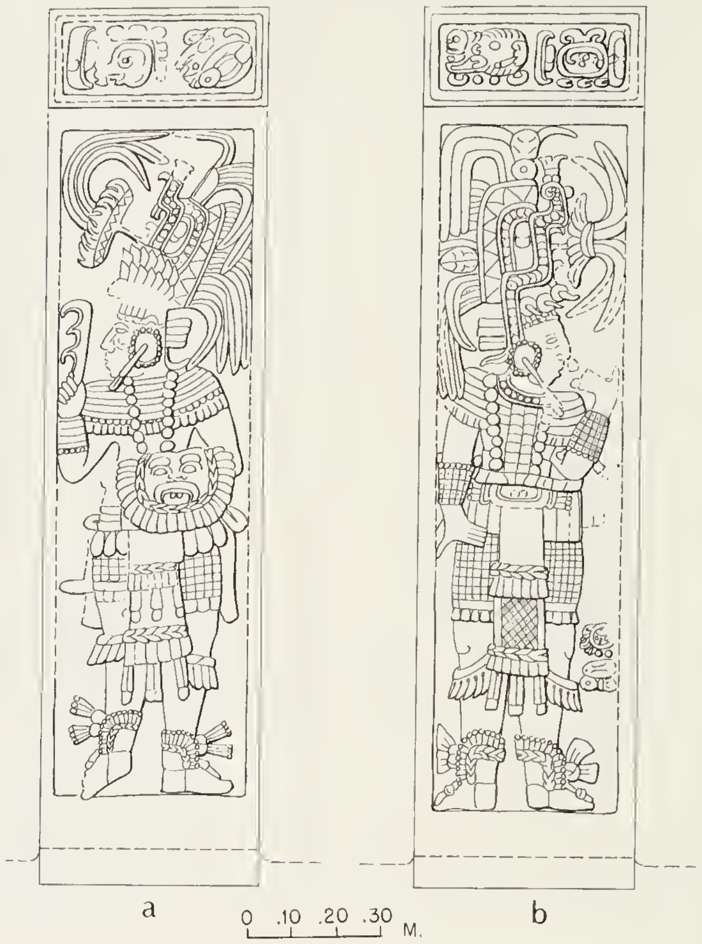


Figure 741. Xcalumkin, Hieroglyphic Group, Middle Building. Sculptured jambs and corbels from south doorway: a, west jamb; b, east jamb.

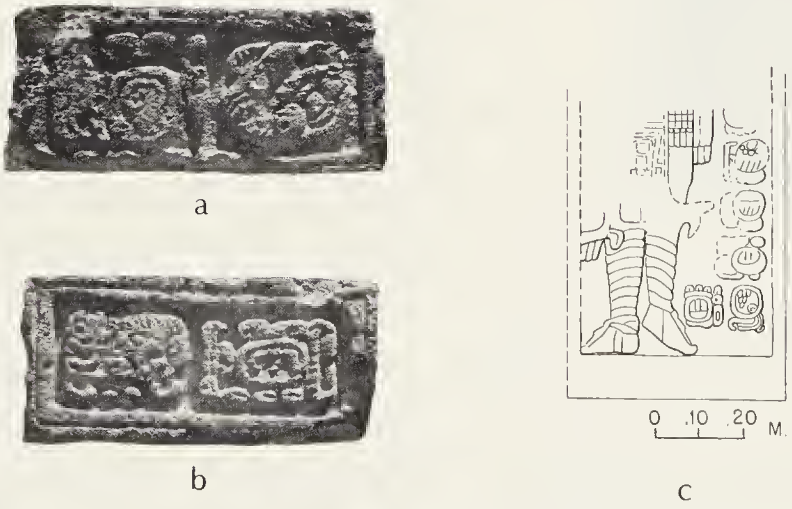


Figure 742. Xcalumkin, Hieroglyphic Group, Middle Building. Sculptured corbels and doorjamb: a, west corbel from south doorway; b, east corbel from south doorway; c, fragment of jamb from north doorway.

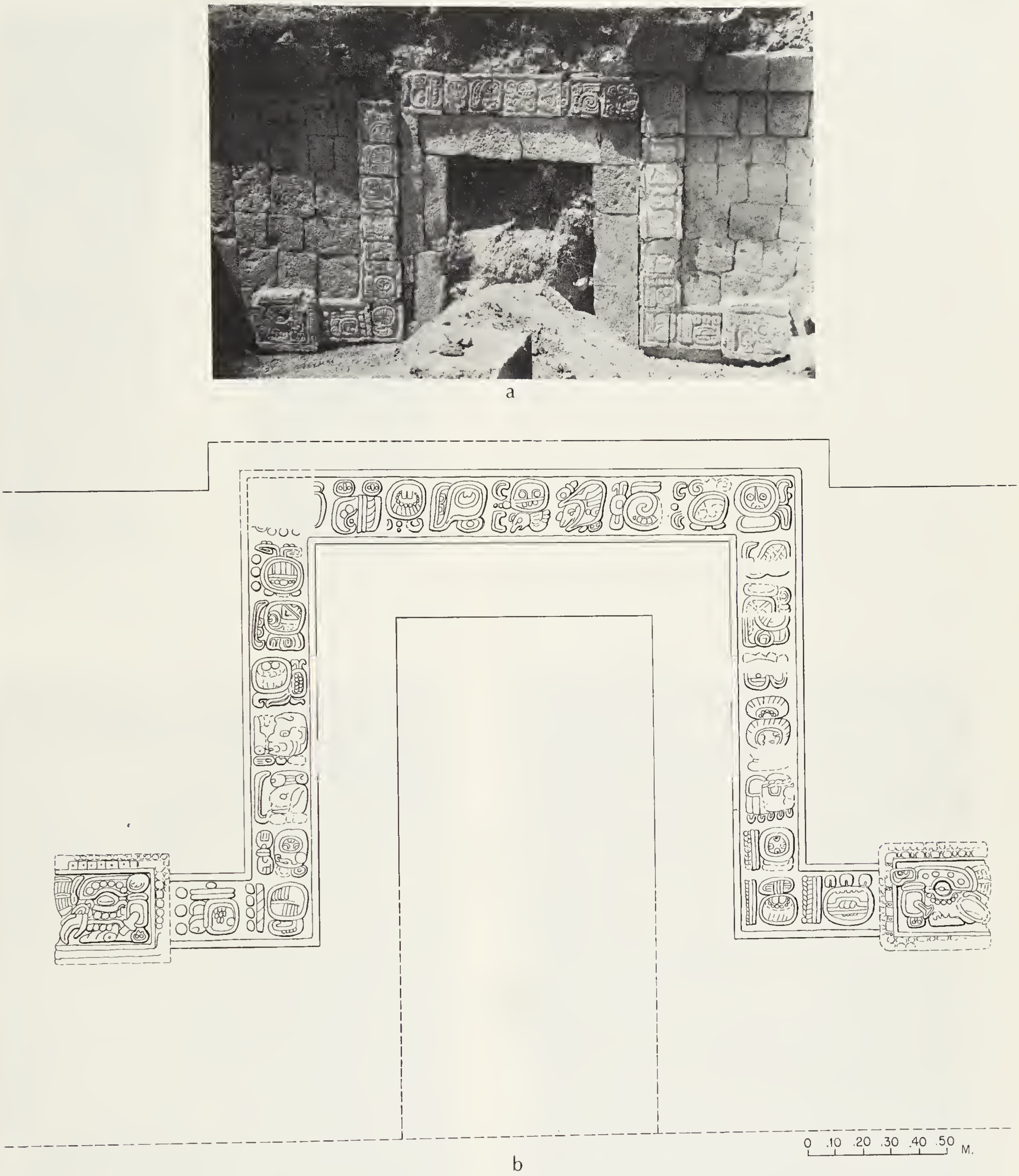


Figure 743. Xcalumkin, Hieroglyphic Group, Middle Building. East inner doorway: a, view from south; b, south elevation.

South Building

As was true of the Middle Building, the South Building appeared as little more than a mound of debris before our excavations. The digging developed a columnar doorway that faced north on the south court of the group and the doorway to a rear chamber, but little else of the plan of the structure was discernible. The elaborately decorated northern entrance and facade suggest that the principal approach to the structure was from the south court, but a fallen sculptured lintel and sculptured doorjambs (see Decoration, below) were found lying on the surface of the southern slope of the mound and too little is known about the building to be certain about its primary orientation.

Sculpture M4 was found in the north room of this structure (see Miscellaneous Sculpture, below).

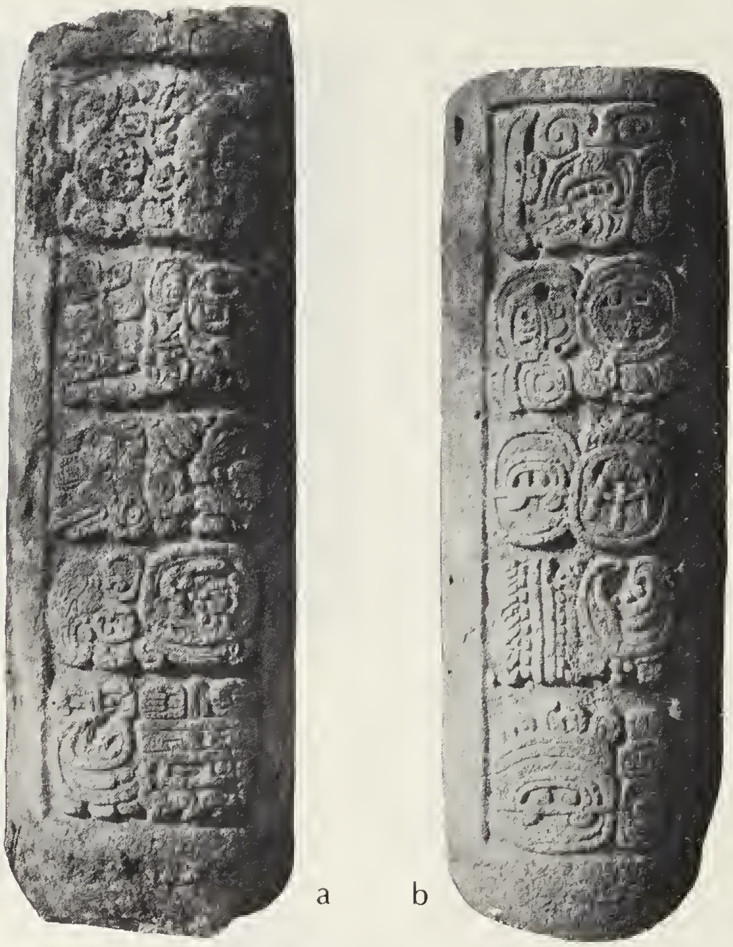


Figure 744. Xcalumkin, Hieroglyphic Group, South Building. Sculptured columns from north doorway: a, east column; b, west column.

SUPERSTRUCTURE

Plan. See figure 735.

Base Molding. Molding on north facade a simple course of well-cut and faced stone .30 m high and projecting .04 m from wall surface above.

Floor. Normal construction, but no step at inner doorway, and floor slopes upward relatively steeply from outer doorway.

Walls. North wall .49 m thick at doorjambs, medial wall .60 m at jambs. Outer (north) wall facing of well-cut,

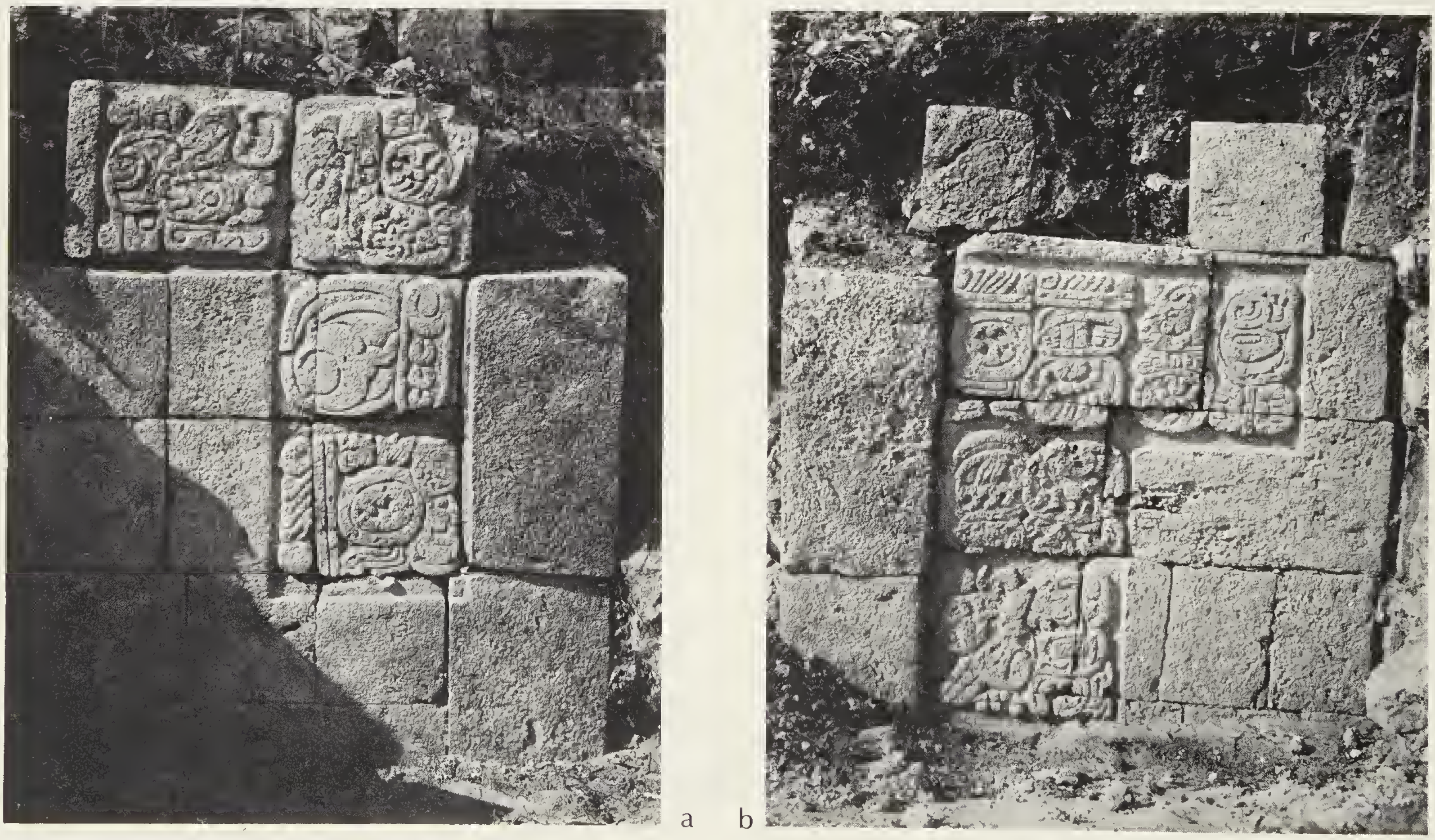


Figure 745. Xcalumkin, Hieroglyphic Group, South Building. Carved wall panels at either side of north doorway: a, east panel; b, west panel.

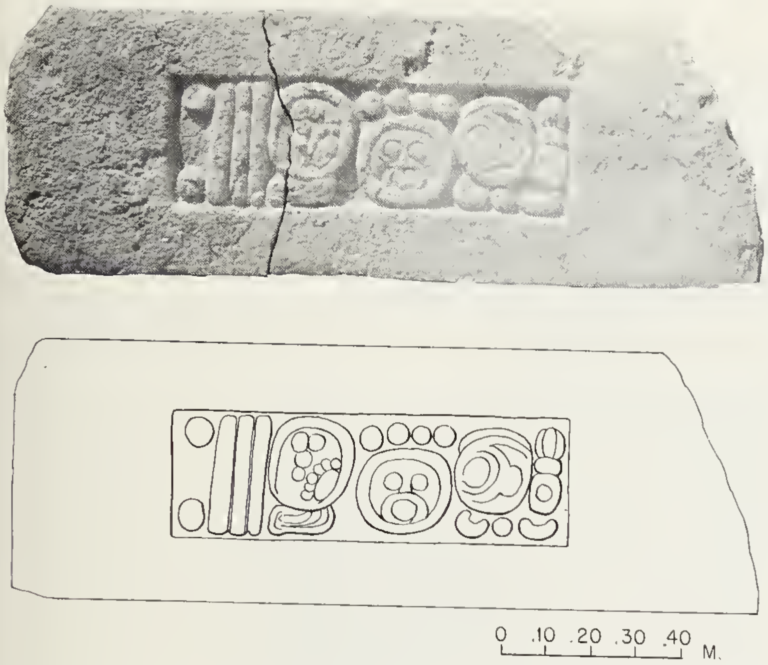


Figure 746. Xcalumkin, Hieroglyphic Group, South Building. Carving on underside of center lintel from north doorway.

well-dressed and fitted stone of moderate size (fig. 745); north face of medial wall of similar stone, but more variable in size (fig. 750) and similar to facing of medial wall of Middle Building (cf. fig. 743a).

Doorways. Entrance in north wall built of two elliptical columns (fig. 708c) similar to those in Middle Building (see above) and jambs of cornerstones with narrow vertical course of stone between. Each column a single stone and sculptured (see Decoration, below). East column .54 m wide and .49 m thick, west column .55 m wide and .48 m thick. No capitals or corbels found but assumed to have been present. Fallen stone lintel, sculptured on underside (see Decoration, below), seemingly from central span of entrance. Doorway in medial wall built of full-width jamb stones supporting stone lintel. Northern edges of jambs and of lintel, and faces of jambs and underside of lintel carved (see Decoration, below).

Moldings. No molding seen in place but there seems to have been rectangular member .24 m high, carved with band of glyphs (see Decoration, below), that presumably was part of medial molding on north facade.

Decoration. North facade of building carries hieroglyphic inscriptions carved on doorway columns (figs. 739b, 744), in wall panels at each side of doorway (figs. 739b, 745), on underside of center lintel (fig. 746), and on what probably was the medial molding (fig. 747), all of which had fallen. On the rear wall of the room entered through the columnar doorway a hieroglyphic band, carved on the edges of the jambs and the edge of the lintel, borders a doorway leading to a rear room (figs. 748, 749). At each side of the inner doorway are sculptured wall panels of seated human figures and glyphic inscriptions (figs. 748, 750), and the faces of the jambs and the underside of the lintel are carved with elaborately costumed human figures and the representation of a fanciful bird with long beaded necklace (fig. 751; and see Proskouriakoff 1950, fig. 95a–c; and Ruz 1945, fig. 25). On the surface of the southern slope of the mound formed by the fall of the South Building was lying a lintel carved with hieroglyphs on one edge and with glyphs and two seated human figures on the underside (fig. 752; and see Proskouriakoff 1950, fig. 95d). With the lintel were parts of doorjambs sculptured on one edge with glyphs (fig. 753). Sculpture

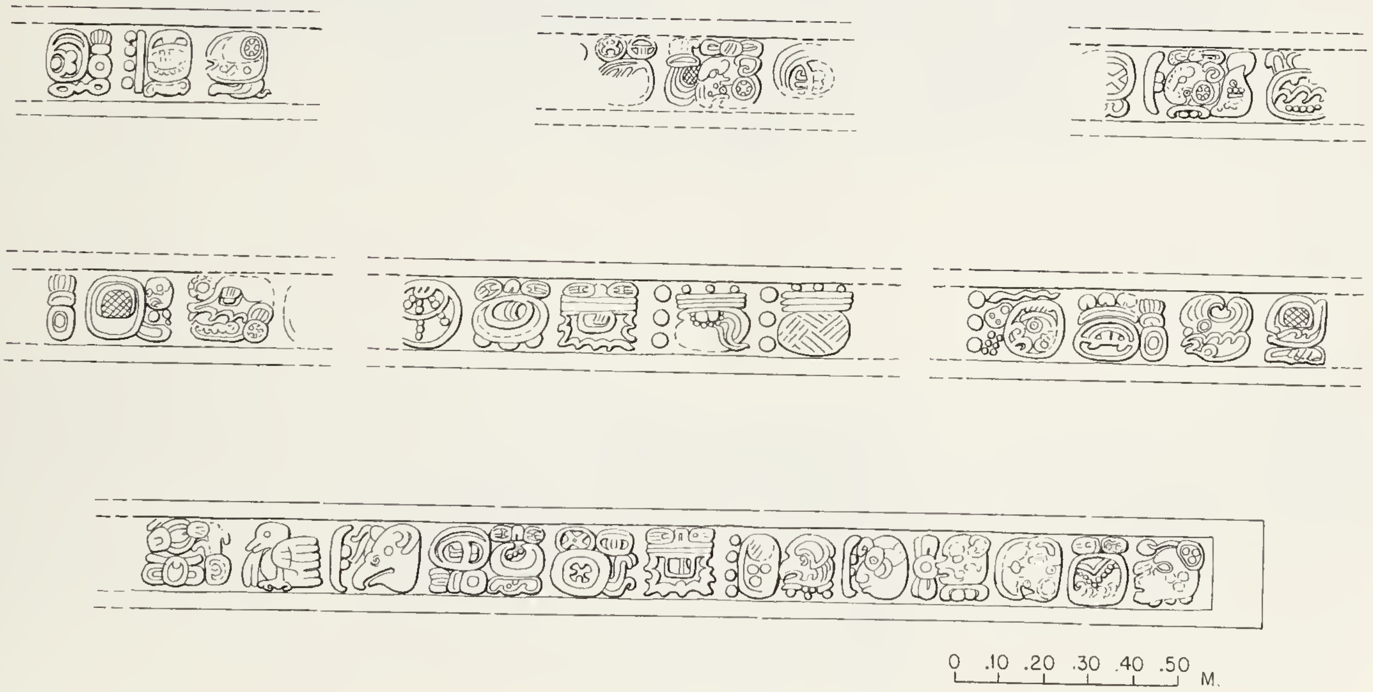


Figure 747. Xcalumkin, Hieroglyphic Group, South Building. Inscription on fallen stones that probably formed medial molding on north facade. Photographs of these stones are on file at Peabody Museum, Harvard University (A–35–508–520).

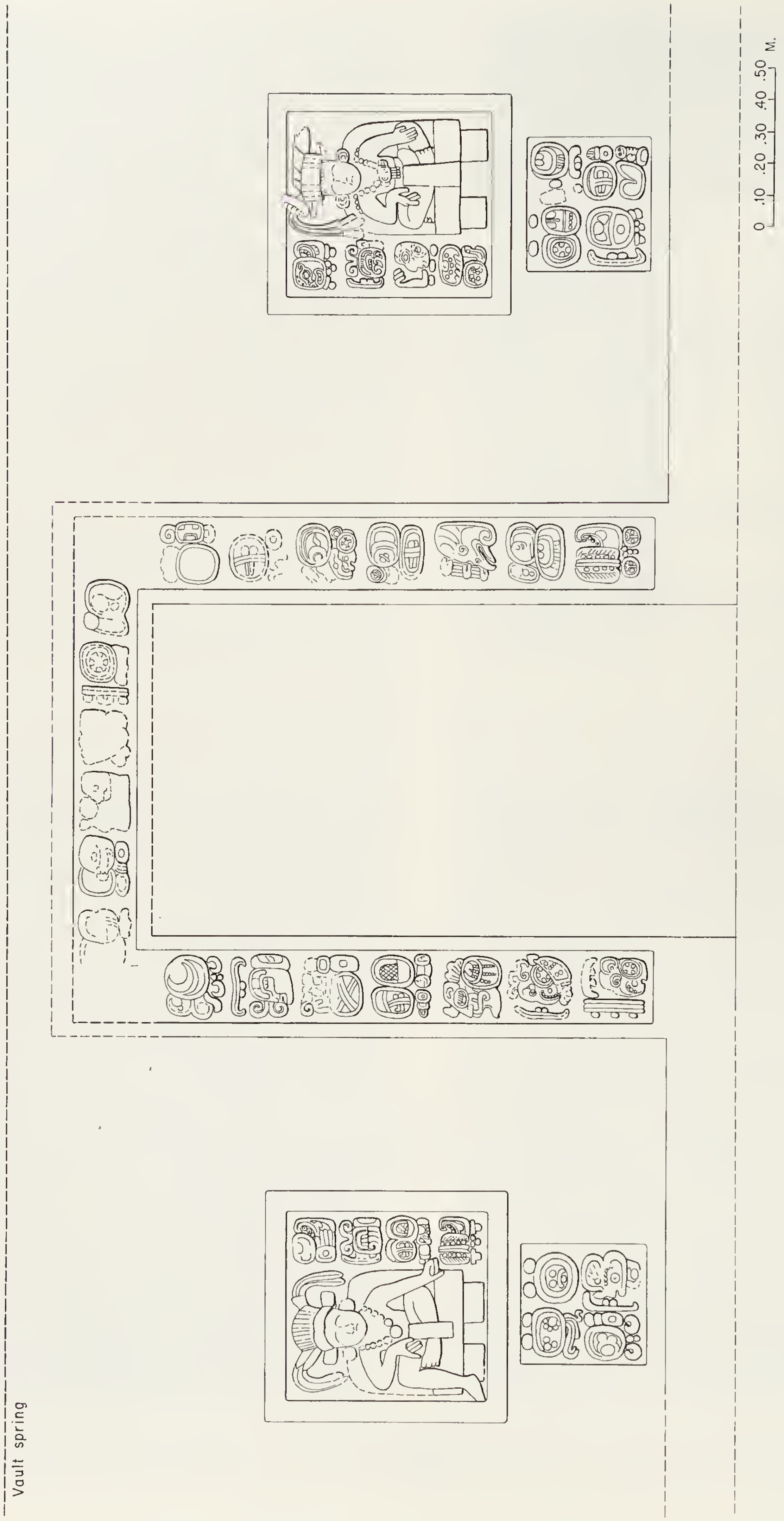


Figure 748. Xcalumkin, Hieroglyphic Group, South Building. Restored elevation of inner doorway.

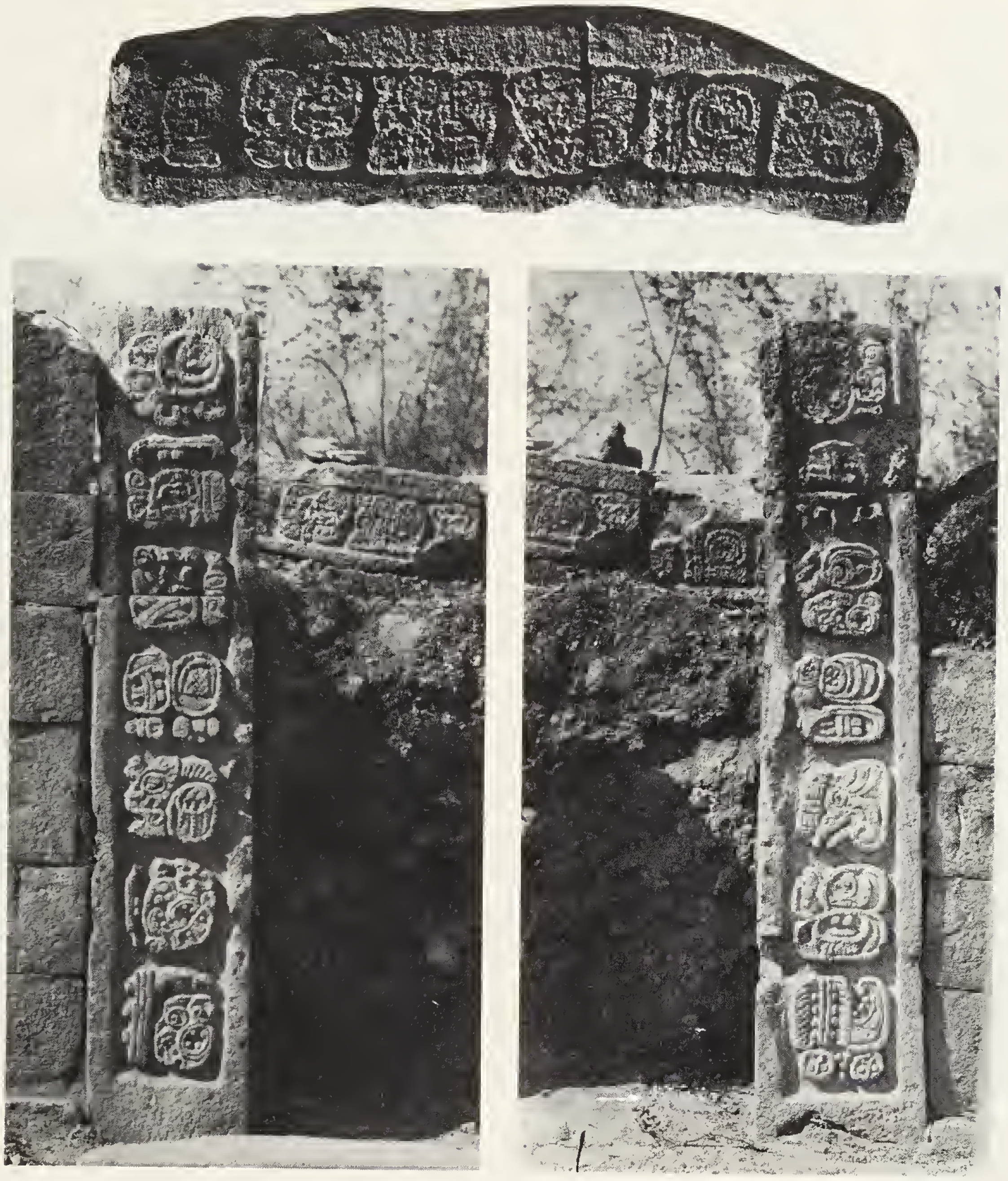


Figure 749. Xcalumkin, Hieroglyphic Group, South Building. Carving on edge of lintel and edges of jambs of inner doorway (see fig. 748).

M4 from the debris in the front (north) room may well have been architectural decoration but here is treated as miscellaneous sculpture (see p. 454). See Proskouriakoff 1950 (p. 166) for discussion of sculpture, and J.E.S. Thompson 1937 (p. 193) and Proskouriakoff 1950 (p. 166) for suggested dates of 9.14.17.0.0 (A.D. 728) and 9.15.2.0.0 (A.D. 733).

A considerable amount of sculpture from the South Building has been removed to the Archaeological, Ethnological, and Historical Museum in Campeche. Not all the pieces are listed in the guide book (Pavon 1942, pp. 35–36, 61–62).

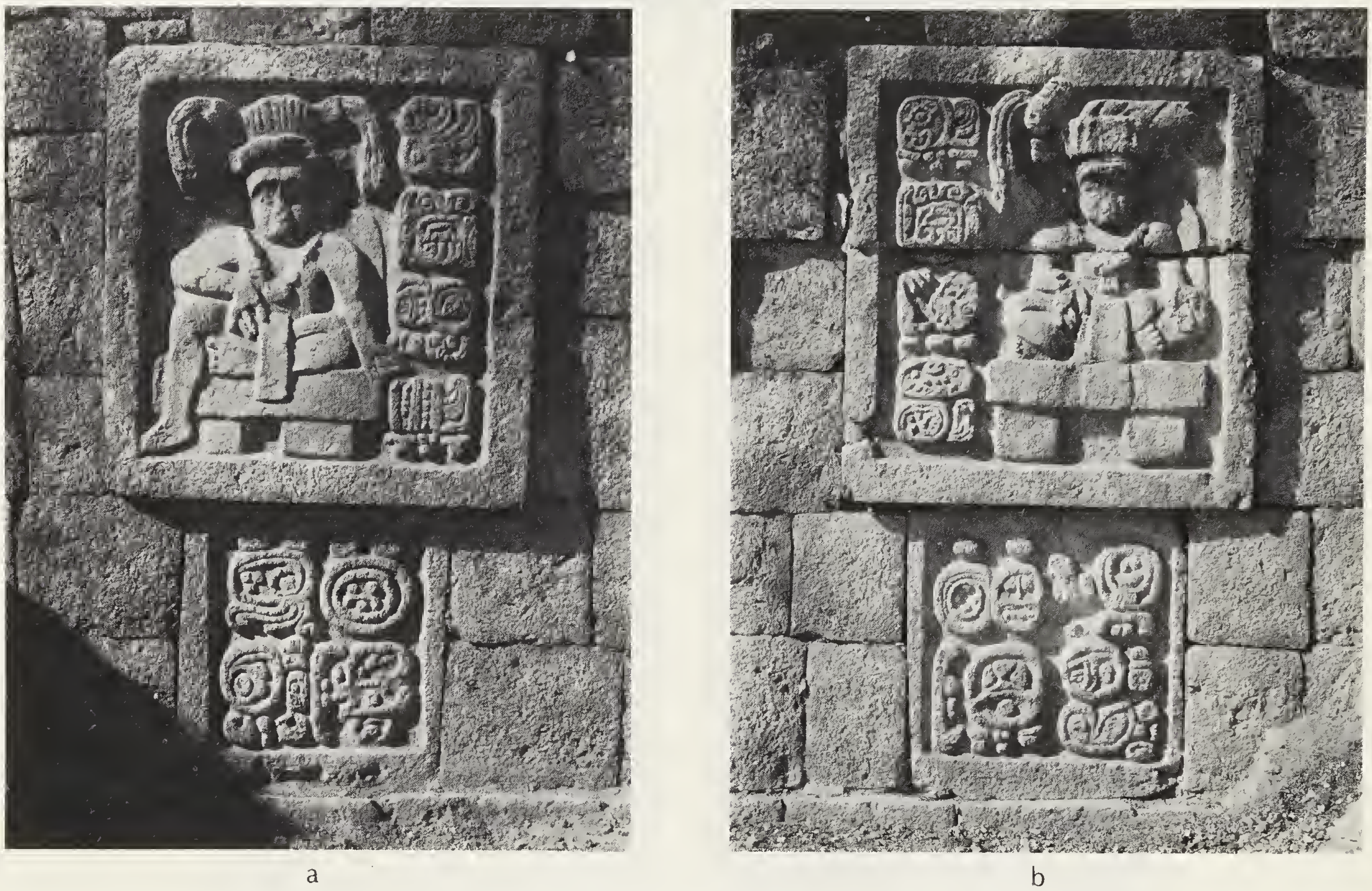


Figure 750. Xcalumkin, Hieroglyphic Group, South Building. Wall panels at either side of inner doorway (see fig. 748): a, east panel; b, west panel.

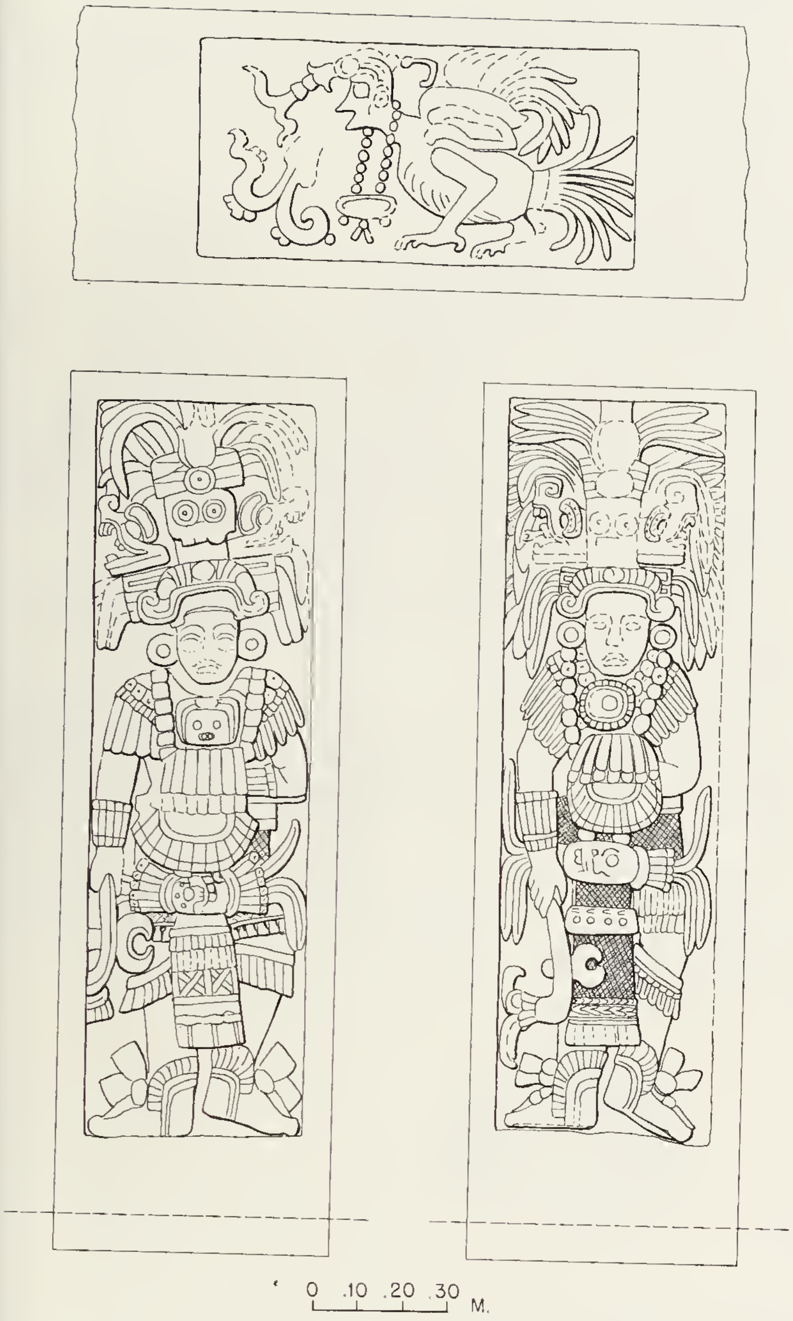


Figure 751. Xcalumkin, Hieroglyphic Group, South Building. Sculptured jambs and lintel of inner doorway.

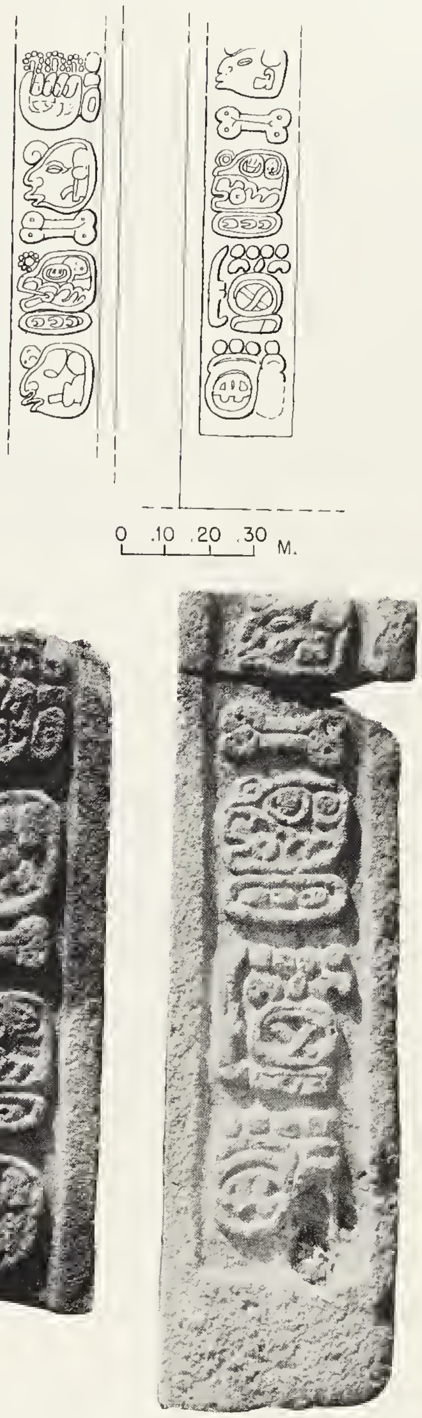


Figure 753. Xcalumkin, Hieroglyphic Group, South Building. Sculpture on parts of doorjambs from southern slope of mound.

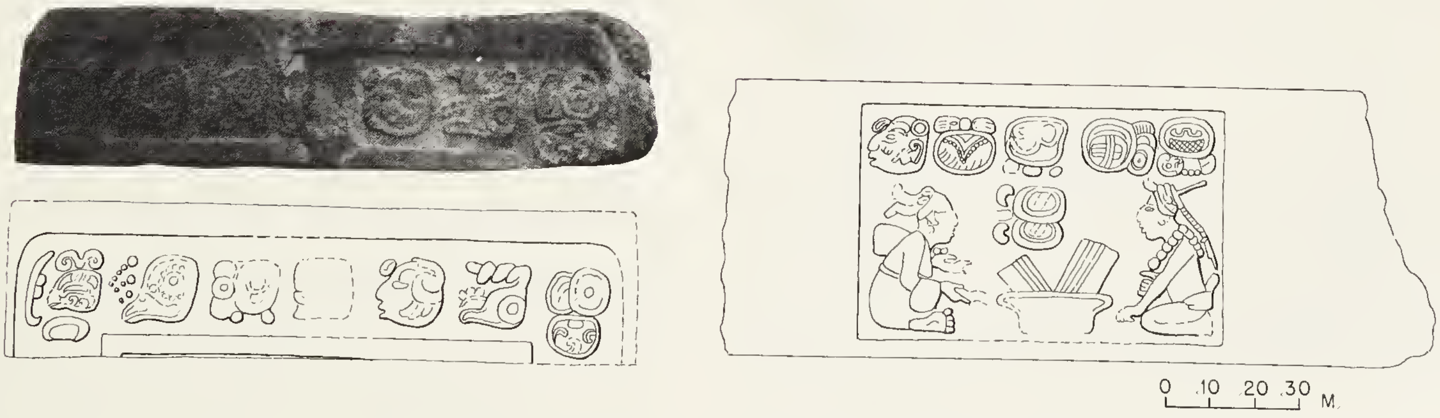


Figure 752. Xcalumkin, Hieroglyphic Group, South Building. Fallen lintel from southern slope of mound.

TEMPLE GROUP

Approximately 1.5 km south of the Main Group, on a small isolated hill near the southern end of the savanna (fig. 701), is a group of structures arranged about a courtyard. The buildings on the north, east, and west sides of the court are fallen, but that on the south is partly standing and supports the fragment of a roof comb. In Maler's (1902, p. 202) time this structure was called a temple, at the time of our work at the ruins, la iglesia, or the church, names commonly given by the Indians to buildings with roof combs. Although nothing is known of the structures on the north, east, and west sides of the court, it seems probable that the building with the roof comb, which faced north on the court, dominated the group and that the primary orientation of this small assemblage of buildings was toward the north.

I have no notes on any substructural terracing here, but Maler (ibid.) mentions such construction. He also mentions chultuns, or water cisterns, in the courtyard.

On the savanna, north of the hill on which rests the Temple Group, is a badly burned and weathered sculpture, M3 (see Miscellaneous Sculpture, below). In the courtyard of the group is a plain column altar that is undoubtedly the pillar referred to by Maler (ibid.).

Temple
(Iglesia or Church)

As already mentioned, this three-room building, only the rear rooms of which are preserved, faces north on a closed courtyard.

SUPERSTRUCTURE

Plan. See figure 754a.

Section. See figure 754b.

Base Molding. Course of well-cut, faced, and fitted stone .28 m high and projecting .03 m from wall.

Walls. Rear wall .65 m thick, west end wall .63 m thick, medial wall and transverse inner wall .70 m thick.

Exterior wall facing is of beautifully cut, dressed, and fitted stone of finest quality found in Puuc ruins. Interior wall masonry slightly less well finished.

Doorways. Only one doorway partly intact. Jamb built of cornerstones finely cut and fitted. Stone lintel equally well finished.

Wall Openings. Windows or ventilators .10 m wide and .16 m high, one course below medial molding (fig. 754b). One at each end of southwest room in rear (south) wall .33 m from end of room. Another in west end wall of same room.

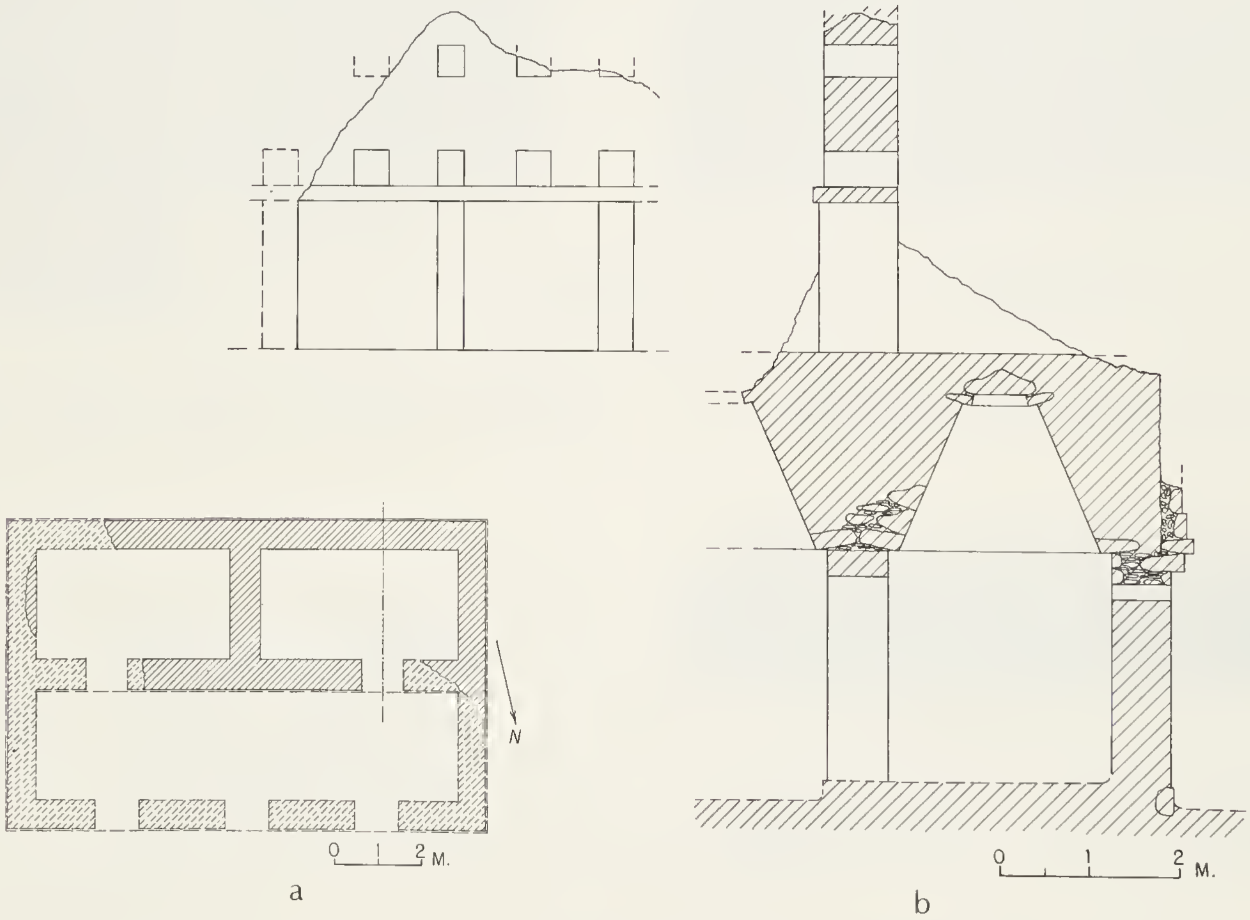


Figure 754. Xcalumkin, Temple: a, plan; b, transverse section and detail of roof comb.

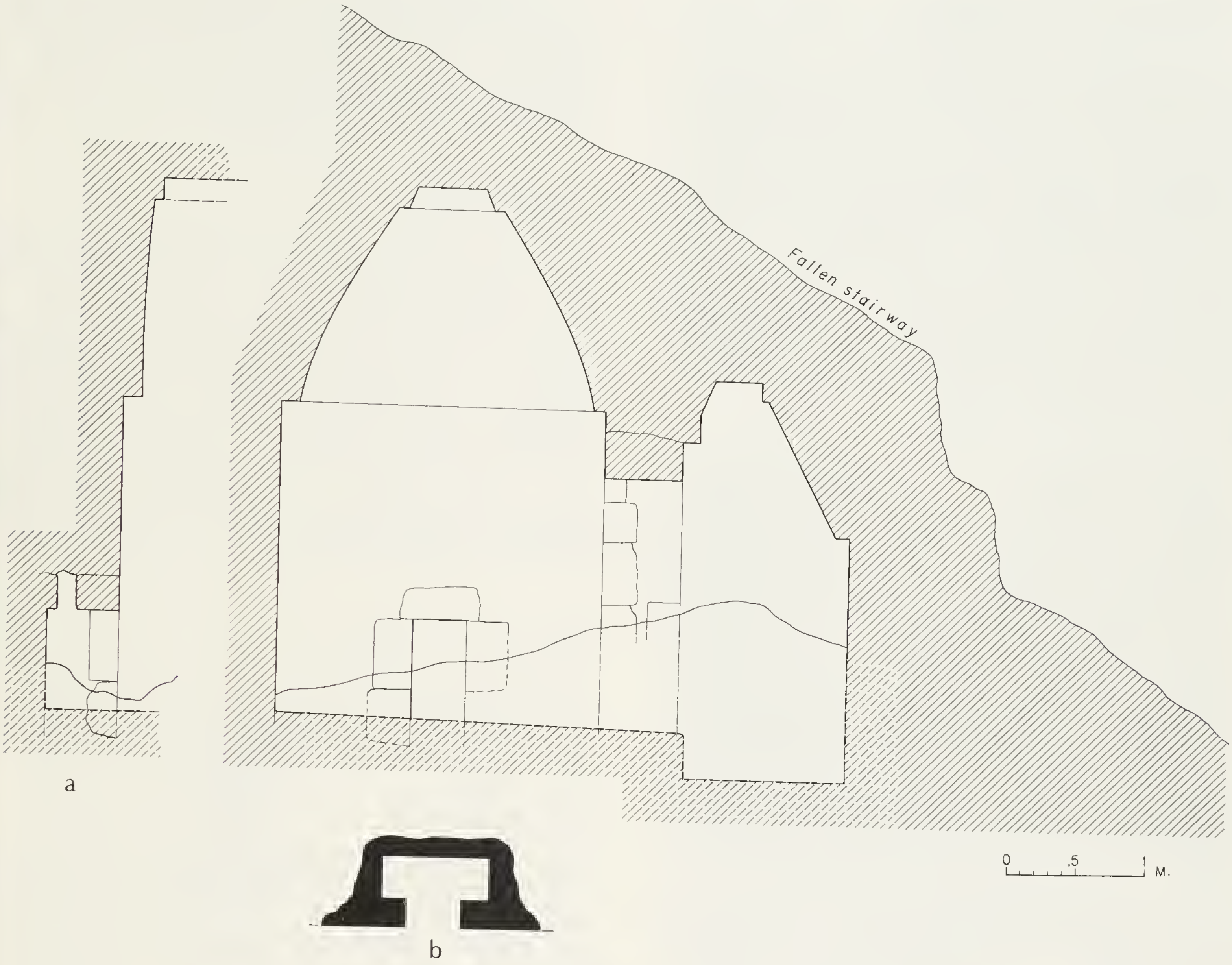


Figure 755. Xcalumkin, South Hill Group. Partly standing building. North-south section through room behind stairway: a, section through east end of room; b, plan of wall niche in east end of room.

Vaults. Straight sided with beautifully flat and true soffits comparable to finest Puuc construction. End walls of vault lean inward .20 m from vertical. Vault stone is specialized, somewhat boot shaped, but not of extreme specialization (fig. 754b). Stone is finely faced and fitted. No beam sockets.

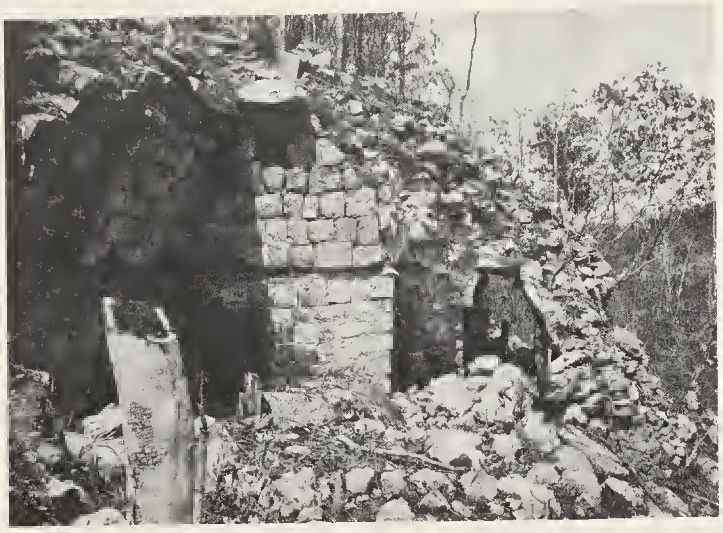
Moldings. Medial molding of three rectangular members (fig. 754b). No cornice molding remains intact.

Roof. Typical fine plaster roof surface similar to flooring.

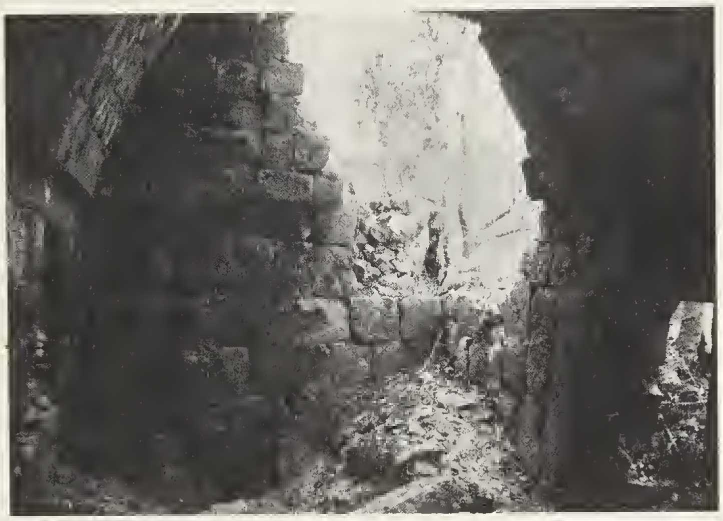
Roof Structure. Fragment of perforated roof comb over medial wall (fig. 754b). About .90 m thick at base and narrows slightly above molding at top of lowest tier of windows. Molding only at front (north) of roof comb. Structure now stands to height of 3.80 m above roof and obviously was higher. Typical of many temple roof combs, masonry is much cruder than that of building below. Roof structure presumably once heavily plastered and very likely carried stucco ornamentation.

SOUTH HILL GROUP

Some 300 m east of the Temple Group, on a slightly larger hill in the southern end of the savanna, is a badly fallen group of structures. I have a few notes on one of the buildings and two photographs of it. There is no plan of the structure, but it would seem from the section that the building faced south where a staircase once rose over a typical understair passageway roofed by a half-vault (fig. 755). Presumably the stairway was for a second story, but I have no notes on that feature.



a



b

Figure 756. Xcalumkin, South Hill Group, partly standing building: a, view from west, showing remains of stairway and passage beneath it; b, room behind stairway, looking east, and showing niche in end wall.

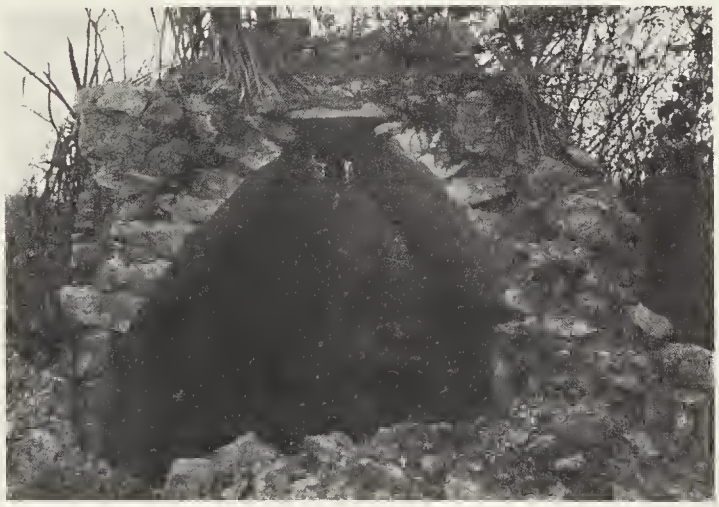


Figure 757. Xcalumkin, North Group, Court North of Road, South Building. View from east, showing vault in section.

Enough wall and vault masonry is visible to show it to be normal, although possibly somewhat cruder than usual (fig. 756). In the east end wall of the room behind the stairway is a nicely built niche at floor level (figs. 755, 756b). Doorjambs are of the cornerstone variety and the lintel of the only standing doorway is of stone.

NORTH GROUP

It has been mentioned (see Size, above) that the North Group, centered about 1 km north-northeast of the Main Group, might be thought of as a separate site, but for the present it is treated as part of Xcalumkin. There is no map of the large group of ruins, which comprises possibly ten courtyard assemblages of buildings and other isolated structures extending outward from the center, and I can only vaguely place the several structures mentioned below. On the whole, the building remains at the North Group are in a deplorable state of ruin with only a few examples of standing masonry.

Court North of Road

A short distance north of the road from Cumpich to the savanna of Xcalumkin are the remains of a courtyard on the south side of which is a small partly-standing building and a larger much-destroyed building on the north.

SOUTH BUILDING

Small, fairly well-cut and finished wall stone, similar to that seen at Cacabxnuk (see p. 458). Doorjambs of wall and cornerstone variety. Stone lintel. Well-faced and fitted, not very specialized vault stone (fig. 757). Medial molding seems to have been of two rectangular members. Traces of red paint on outer face of lintel.

NORTH BUILDING

Only central opening of what had been triple entrance now standing (fig. 758a). Doorway remarkably like that of North Building at Main Group (see p. 433). Only difference is design of bands on facade columns (fig. 758b).

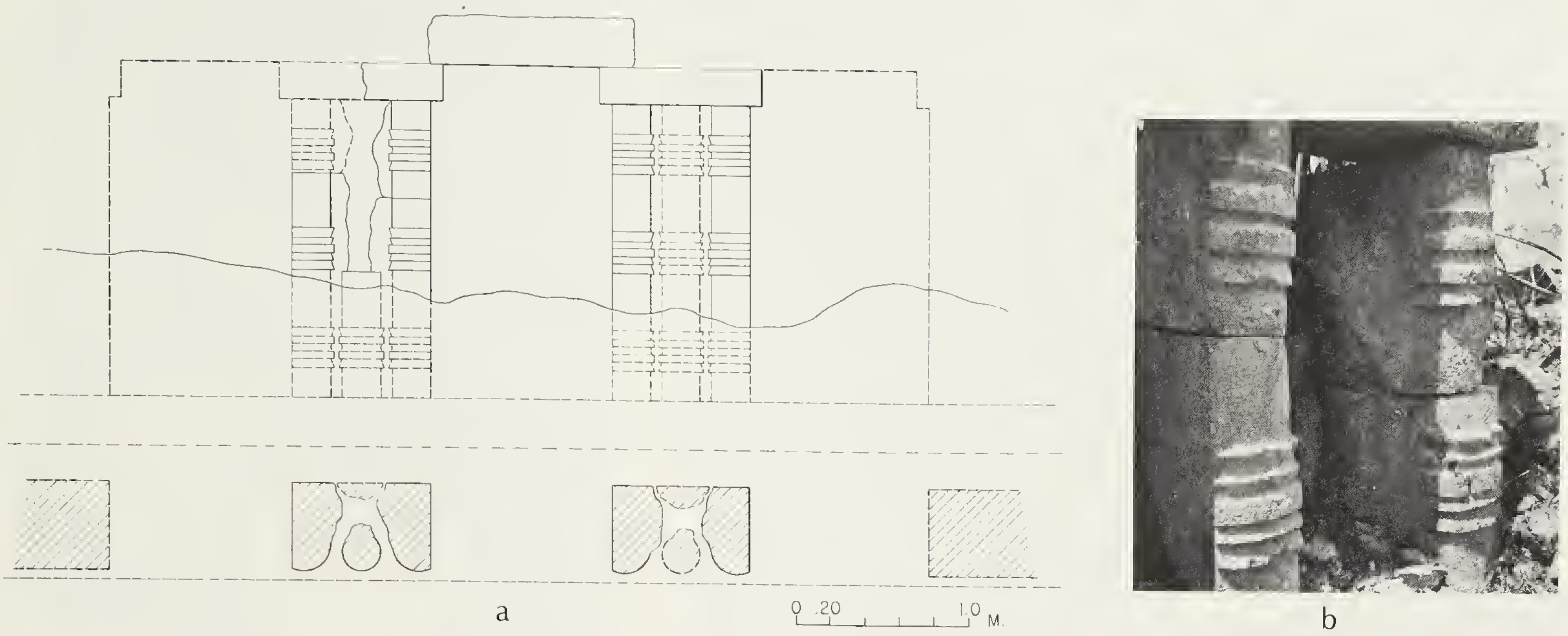
Buildings South of Road

CRUDE MASONRY BUILDING

Maybe 75 m south of the Cumpich-Xcalumkin road is a small group of buildings of which a fair amount of the walls and vault of one structure is standing.

SUPERSTRUCTURE

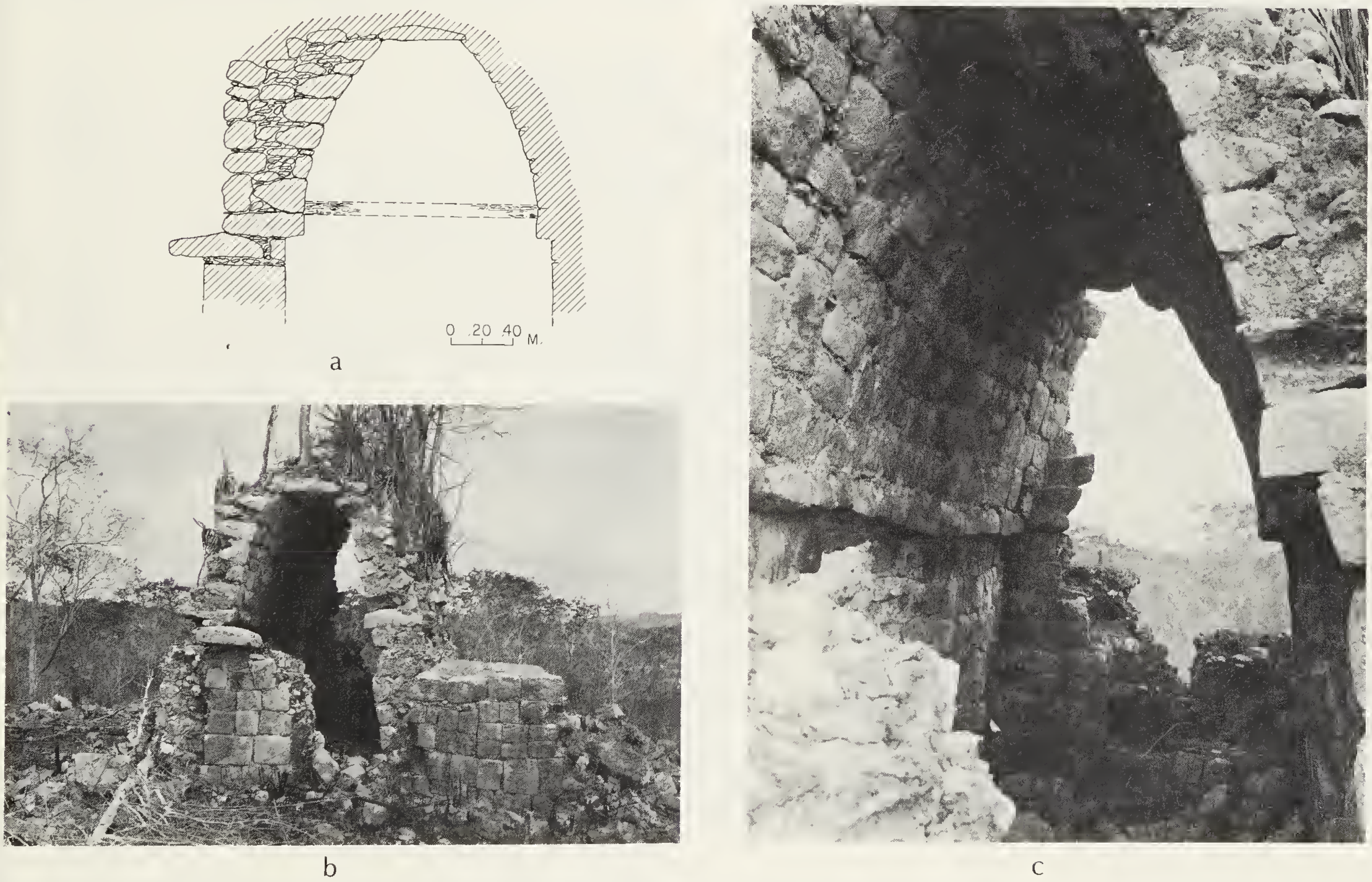
Walls. Poorly cut, shaped, and fitted stone employing considerable use of spalls between stones. Large range in size of stone (fig. 759b). Inner wall facing cruder than outer



a

b

Figure 758. Xcalumkin, North Group, Court North of Road, North Building. Main entrance: a, restored elevation and plan; b, detail of jamb stones that simulate banded split columns.



a

b

c

Figure 759. Xcalumkin, North Group, Crude Masonry Building: a, section through vault; b, view from east; c, close view of vault.

facing. Usual construction level below medial molding (fig. 759a). Wall thickness .54 m.

Wall Openings. Small windows or ventilators in all four walls of standing room.

Vault. Crudely cut, shaped, and fitted stone with much chinking between stones (fig. 759). No corbels beneath capstones.

Moldings. Only first course of medial molding, a roughly shaped and faced slab seemingly part of a rectangular member, remains in position (fig. 759a, b).

SOUTHERN BUILDING

In the southern limits of the North Group is a structure in which two walls and half the vault of one room are standing. The wall facing is rather rough and the stones tend to be small (fig. 760). The vault stone also is relatively poorly finished and not very specialized. While this masonry is crude compared to most Puuc construction, it is not as rough as the Crude Masonry Building just described.

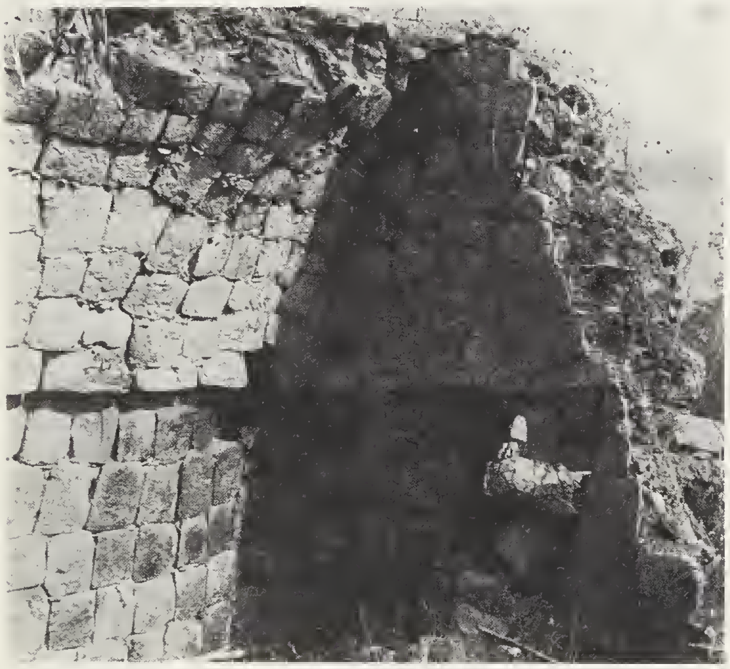


Figure 760. Xcalumkin, North Group, Southern Building. Wall and vault masonry.

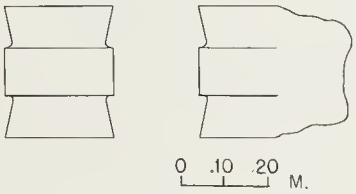


Figure 761. Xcalumkin, Platform north of Initial Series Court. Fallen spool element.

MISCELLANEOUS NOTES

No elements of facade masks were observed anywhere at the site, and cut-stone architectural decoration, other than moldings, was generally scarce. Besides the examples already enumerated, some spool elements, probably from banded facade columns or possibly from a molding, were seen lying about a large platform that supported a once-vaulted, but now totally collapsed, building some distance north of the Initial Series Court (fig. 761).

MISCELLANEOUS SCULPTURE

M1. Stone human head and headdress (fig. 762a). Somewhat weathered, with traces of plaster. Sculpture measures .18 m high, .14 m wide, .09 m thick. Found in North Hill Group. My notes do not give precise location.

M2. Seated human figure of stone (fig. 762b). Badly burned and weathered. Figure is about .85 m high. Found in savanna west of Main Group.

M3. Seated human figure of stone, terribly burned and weathered (fig. 762c). Figure measures .95 m high. Found in savanna just north of Temple Group. Maler (1902, p. 202) describes this sculpture as "a crouching monumental figure on a low two-stepped pedestal. This figure . . . is extremely weatherworn and unrecognizable. On the head the round ear ornament alone is still recognizable."

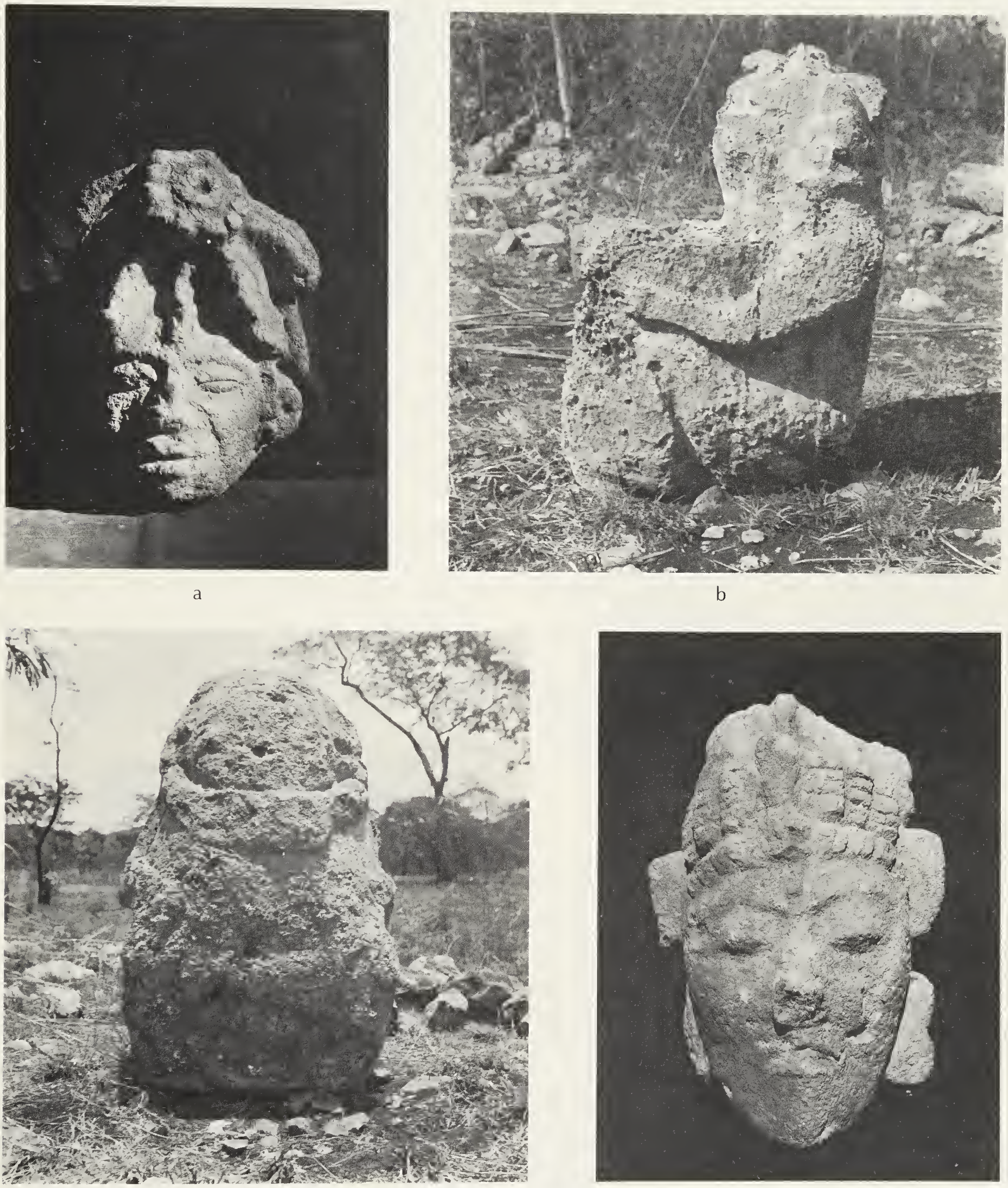
M4. Modeled stucco human head with headdress (fig. 762d). Tenon at rear apparently for attachment to wall or in larger composition. Blue paint on final coat of plaster on head. Maximum height of head .27 m, maximum width .19 m, maximum thickness .19 m. Tenon .10 m long, .12 m high. Found fallen in the debris of the front (north) room of the South Building in the Hieroglyphic Group.

MONUMENTS

ALTARS

Six altars were observed at Xcalumkin, four of which are shown on the plan of the Initial Series Court (fig. 703). A fifth altar lies in a court a short distance to the northeast and thus is also in the Main Group. The sixth example found was in the Temple Group. There are almost certainly many more altars at Xcalumkin than we saw, and the distribution of the examples observed probably has little meaning other than to emphasize the concentration of monuments in the Main Group.

Three of the monuments (Altars 2, 4, 5), all of them rectangular in plan, are carved, and a fourth (Altar 1), a drum altar, may also have been carved. Besides the three rectangular monuments, a relatively rare shape for altars in the Puuc region, there are two drum altars (Altars 1, 3), and one (Altar 6), the only example not in the Main Group,



a b

c d

Figure 762. Xcalumkin. Miscellaneous sculpture: a, M1, human head of stone; b, M2, seated human figure of stone; c, M3, badly disfigured seated human figure of stone; d, M4, human head of stucco.

is recorded as a column altar, but I have no measurements for it.

Altar 1. Possibly carved. Height .73 m, diameter approx. .85 m. Lying on square platform in court north of Initial Series Building (fig. 703). Drum altar badly burned and weathered. May have been carved on top but not at all certain.

Altar 2. Carved (fig. 763a). About same size as Altar 4 (see below). Partly buried in talus of mound on west side of court north of Initial Series Building (fig. 703). Badly broken rectangular altar with three-member molding on all four sides at top. I have no measurements.

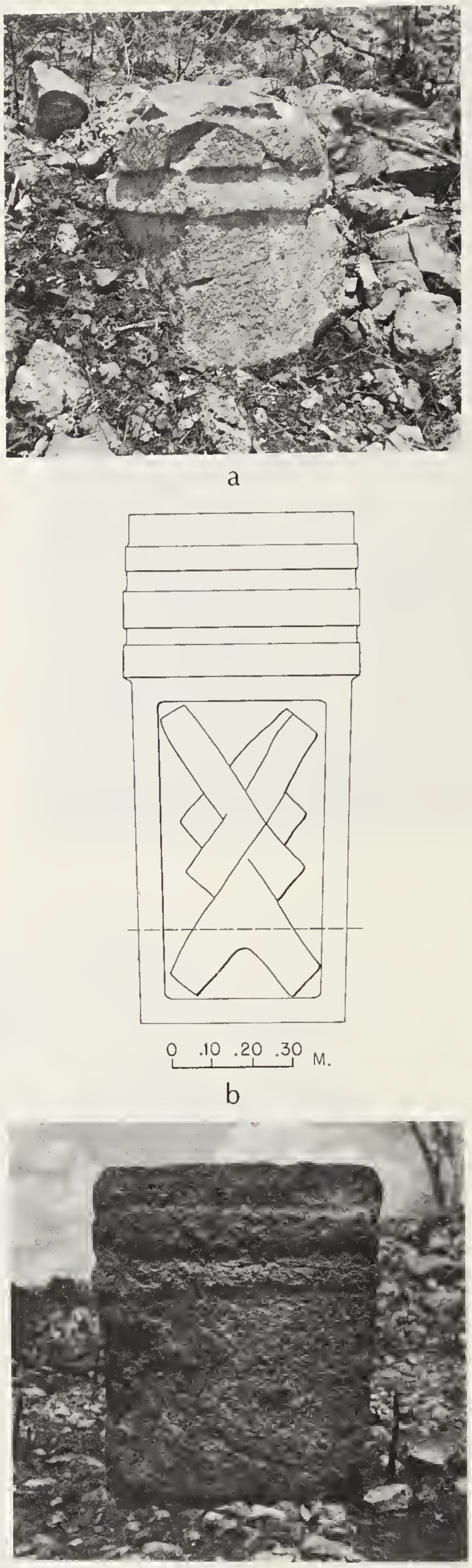
Altar 3. Probably plain. Height .60 m, diameter approx. .90 m. Lying in court north of Initial Series Building and at foot of stairway to Initial Series Court (fig. 703). Completely smashed drum altar.

Altar 4. Carved (fig. 763b). Height 1.25 m, maximum width .58 m, maximum depth .43 m. Lying in court north of Initial Series Building and at foot of stairway to Initial Series Court (fig. 703).

Broken rectangular altar with elaborate molding on all sides at top and plait or mat pattern in panel on one side. Plaster mark on stone indicates altar was set .23 m deep in floor or wherever monument once rested.

Altar 5. Carved (fig. 763c). Height .55 m, maximum width .48 m, maximum depth .42 m. In second court northeast of Initial Series Building. Weathered but unbroken rectangular altar with same variety of molding as on Altar 4 (see above).

Altar 6. Plain. No measurements recorded. In courtyard of Temple Group (see p. 450). My only description of this monument calls it a plain round column altar.



a

b

c

Figure 763. Xcalumkin. Altars 2, 4, 5. a, Altar 2; b, Altar 4; c, Altar 5.

Cumpich

About 4 km east-northeast of the North Group at Xcalumkin, on the road that comes from Hecelchakan and crosses the Dzitbalche-Bolonchenticul road in the Xcalumkin savanna, is the village of Cumpich, situated in an area thick with ruins. Connected by road to the larger towns of Dzitbalche and Hecelchakan, each some 14–15 km distant (see frontispiece), and with a permanent water supply furnished by several wells, the village offers an excellent base for exploration of the northern ruins in Campeche.

If Roys (1957, p. 24) is correct in identifying Cumpich as the *encomienda* of "Yxconpiche" in the 1549 tax list, the settlement goes back to the very beginnings of Colonial history. The fallen and scattered remains of ancient stone structures in the village, moreover, mark an even earlier aboriginal occupation. The famous cenote (ibid.), whose entrance is in the village plaza, is no longer used as a source of water, but at the time of our visit (1940) the older inhabitants remembered when ladders led from level to level down to water. Undoubtedly this permanent supply of water was a vital factor in attracting an aboriginal population to this spot and may well have been an influence in determining the relatively heavy settlement, as implied by the numerous ruin sites, for some distance around Cumpich (see frontispiece).

The concentration of ruins, which are little more than heaps of stone and rubble, lies on the southern edge of the village. The ancient buildings have been extensively quarried by the villagers and stone from the ruins is seen in the walls of the old church, in paving before houses, and generally scattered throughout the town. Of what seems to have been a relatively large site, the only standing masonry visible is in buildings on the east and west sides of what was once a closed court. The fragment of a vault and sections of the wall of the eastern building show the construction to have been like that seen better in the North Building of the North Group at Cacabxnuc (see p. 458, below). Across the court the western building has exposed at its southern end a section of wall built of small well-cut and faced stone, like that in the eastern structure, whereas the debris of this building (western) near the center shows large well-cut and faced wall stone, and large well-cut full-width jamb stones. In the southwest corner of the court was lying the weathered fragment of a sculptured column (fig. 764), .51 m in diameter and .30 m high, presumably from a doorway.

Beside the well-cut and faced stone already mentioned in the walls of the church and in paving before houses, we observed built into modern walls and scattered about the village full-width jamb stones, large well-cut stone lintels, column shafts, some with slightly flattened sides, a rectangular pillar, banded with a three-member molding (cf. South Group, Cacabxnuc, p. 462, below), presumably from a doorway, colonnettes from a molding, and cylindrical altars. Several pieces of sculpture were found and recorded (see below).

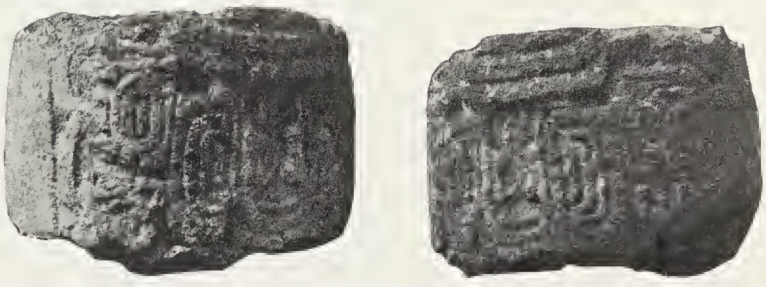


Figure 764. Cumpich. Fragment of sculptured column from ruins on south edge of village.

MISCELLANEOUS SCULPTURE

M1. Stone figure of man with facial tattoo, snake knotted about neck, and phallic emphasis (see E.W. Andrews 1943, fig. 19b; Ruz 1945, fig. 28). Height .91 m (Pavon 1942, p. 51, mislabeled Xcalumkin).

Provenience Cumpich (E.W. Andrews 1943, p. 84; Ruz 1945, p. 49; but see p. 458, below). Now in Archaeological, Ethnological, and Historical Museum of Campeche (Pavon 1942, p. 51). See Andrews 1943 (pp. 84–87) and Ruz 1945 (pp. 49–50) for description and discussion of sculpture.

M2. Stone figure of woman, squatting, with arms behind back and hands on buttocks. Head and parts of arms and legs broken off (fig. 765a). Height .74 m, maximum width (at hips) .35 m, maximum depth (knee to buttock) .42 m.

Found in village wall. Reputedly from Cacabxnuc (see p. 458, below). Genitalia emphasized and possibly to be associated with sculpture M1 (see above).

M3. Low-relief sculpture of feathers or plumes (fig. 765b). Height .49 m, width .31 m, maximum thickness .22 m. Found in yard of house in village. Reputedly from Cacabxnuc. Stone appears to be from coping course of building.

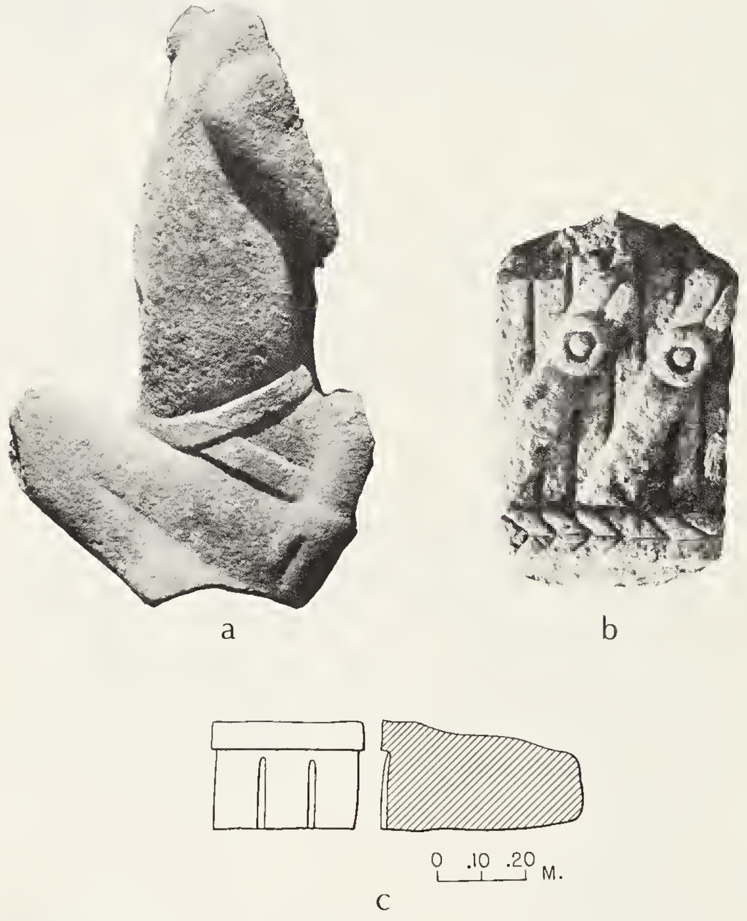


Figure 765. Cumpich. Miscellaneous sculpture: a, M2, stone figure of woman; b, M3, bas-relief showing plumes; c, M4, fragment of architectural molding.

M4. Low-relief carving of band with "feather" decoration below (fig. 765c). Height .24 m, width .34 m, maximum thickness .46 m. Found in house-lot wall in village. Apparently fragment of architectural molding.

Cacabxnuc

ETYMOLOGY

cacab, high fertile land (Roys 1935, p. 7; and see Pollock 1970, p. 35); *xnuc,* old woman (Roys, personal communication). Variant spelling: Cacabxnuk.

SITUATION

Approximately 1.5 km south-southeast of Cumpich and 4 km east-northeast of Main Group at Xcalumkin.

TOPOGRAPHY

Low hills and small valleys. Building remains located on valley floors, on hillsides, and on hilltops.

WATER SUPPLY

No known permanent natural water (but see Cumpich cenote, p. 456). Large number of chultuns observed, many in good repair. Nearest modern water supply is from wells in Cumpich.

SIZE

Site as presently known consists of about half dozen groups stretched along a north-northwest–south-southeast axis about 1 km in length. Groups appear not to have been large but to have contained some good-sized individual structures.

CIVIC PLAN

Seems basically to be the same as that at Xculoc (see p. 377) and at Xcalumkin (see p. 419), but on smaller scale. Central group of courtyards with surrounding structures on valley floor. Stretching out from central group for about 500 m to north and south are hillside and hilltop groups.

Orientation. Only building on which fairly accurate observation was possible faced 7° west of south.

CENTRAL GROUP

What appears to be the approximate center of the site is marked by a group of courtyards, platforms, and low mounds raised slightly above the valley floor. The ruins have been quarried for building stone for years by the inhabitants of Cumpich, and there is little architecture left standing. All facing stone has been stripped from the walls, but it was obviously of veneer type, and judging from the large, beautifully cut and dressed jamb stones, lintels, and doorway columns, the wall stone must also have been well cut and finished. Fallen elements of decoration observed in the debris included split columns and colonnettes, dentate (serrated) stones (see Spinden 1913, fig. 177a), and a large rosette.

HILLSIDE GROUP

A little way north of the Central Group are some hillside terraces, approached by a broad causeway and stairway, that once supported vaulted buildings now demolished by the quarrying activities of the villagers from Cumpich. The quarrying has uncovered an early structure that was incorporated into, and buried beneath, the later terracing. A vaulted room, filled secondarily with stone and rubble, shows a wide (2.06 m) doorway with a huge stone lintel. This is one of the longest spans by a stone lintel yet recorded. The wall is .65 m thick and faced with well-cut and dressed stone, poorly fitted, and mixed with some rough stone. The medial molding is made of roughly shaped, deeply tenoned stone, and above it there is a hodgepodge of rough facing and indentations that suggest the use of stucco as facade decoration. The general plane of the upper facade overhangs the lower wall zone.

We were told by the inhabitants of Cumpich that the statues of a man and a woman were removed from the debris of this group and taken to the village. These statues are presumably Sculptures M1 and M2 from Cumpich (see p. 457, above).

NORTH GROUP

Some 300–400 m north-northwest of the Central Group, located on top of a hill, is a small courtyard with a relatively well-preserved building on the north side (fig. 766). The building faces south on the court which rests on a substructural platform that varies in height from only slightly above ground level to about 3 m owing to the natural slope of the terrain.

North Building

SUPERSTRUCTURE

Plan. See figure 767.

Section. See figure 768.

Elevation. See figure 769. Partly restored.

Base Molding. Simple course of well-cut and fitted stone projecting .08 m beyond face of wall above (figs. 768, 769).

Walls. Outer walls and interior transverse walls .52 m thick; medial wall 1 m thick. Wall facing of well-cut and fitted stone, rather small compared to that common in eastern Puuc (figs. 766, 770, 772).

Doorways. Jambs built of a combination of full-width stones and cornerstones (figs. 766, 771a). Well-cut and dressed stone lintels.

Pair of doorways in north room filled secondarily with masonry and new single doorway opened at center of north wall (fig. 767).

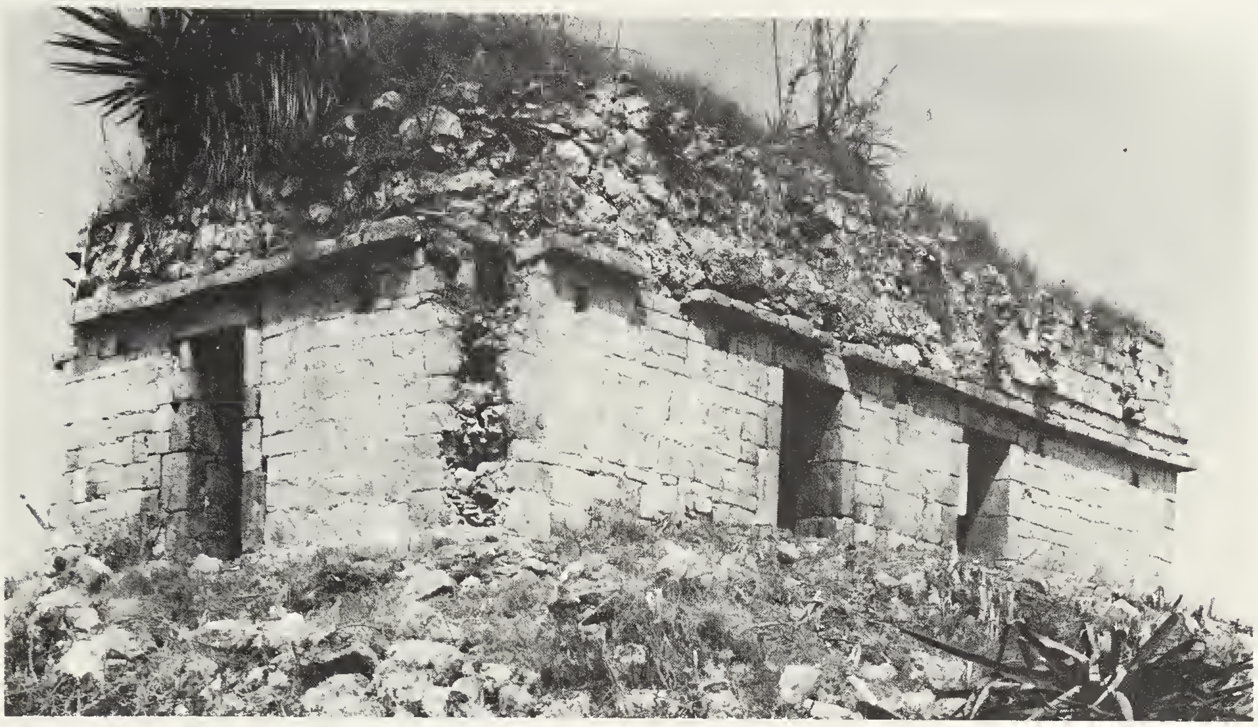


Figure 766. Cacabxnuc, North Group, North Building. View from southwest.

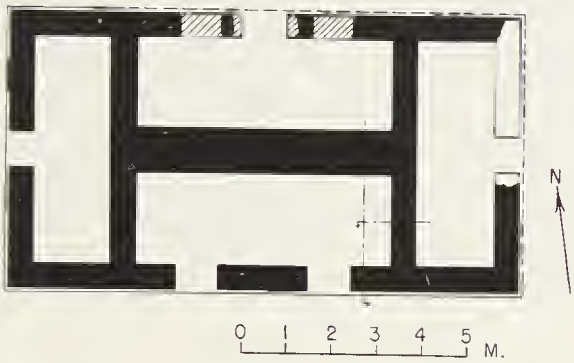


Figure 767. Cacabxnuc, North Group. Plan of North Building.

Wall Openings, Depressions, and Projections. Four small windows or ventilators approximately .15 m square on level of door lintels in south wall (figs. 766, 769, 770c). Two such windows in east and west walls (fig. 766) and presumably in north wall. Pairs of two-hole cordholders at each side of blocked doorways in north room, and pairs of hemispheroid rod sockets about .035 m in diameter and .015 m deep in jambs of west doorway (fig. 771a). Ring type of cordholder, .16 m in diameter and .065 m thick, tenoned into wall at each side of western doorway (fig. 771a). Projecting tenons, in the form of both rough stone pegs and well-cut stones, that supported modeled stucco decoration are seen on south facade (figs. 766, 769, 770c). Presumably also were in upper facade zones on north, east, and west sides of building.

Vaults and Beams. Vaults built of roughly shaped slabs, the exposed ends of which were tilted upward and were heavily plastered to approximate a smooth soffit slope (figs. 768, 770b, 772; and cf. Kupaloma, Eastern Building, fig. 562c). Ends of vaults, however, faced with

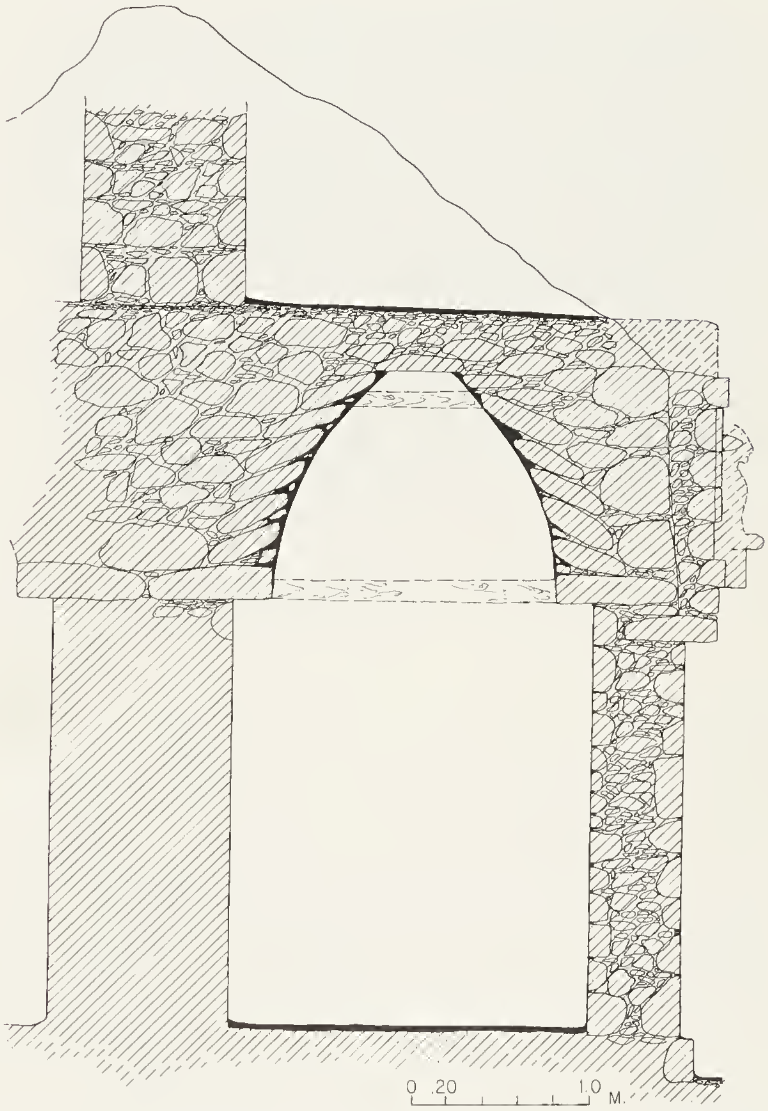


Figure 768. Cacabxnuc, North Group, North Building. North-south section through south room.

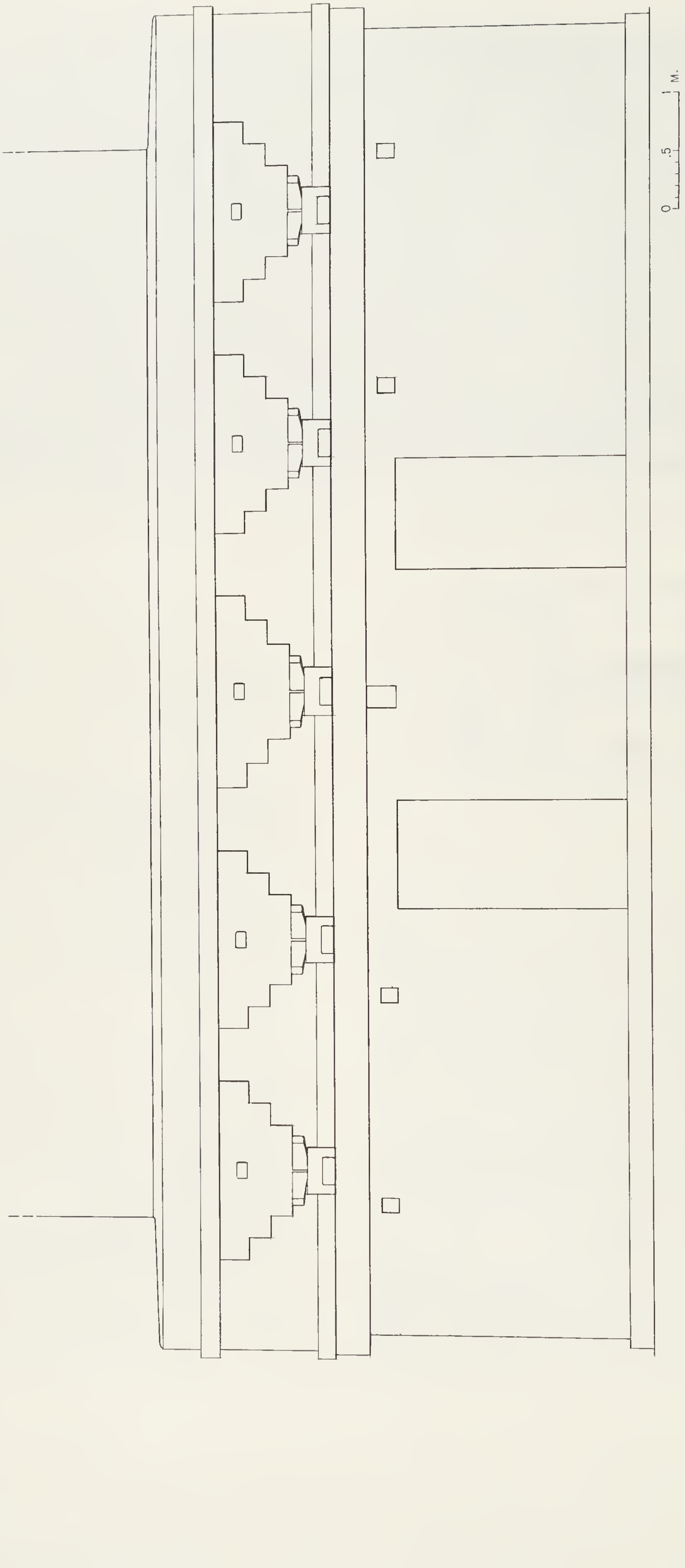


Figure 769. Cacabxnuc, North Group, North Building. Restored elevation of south facade.

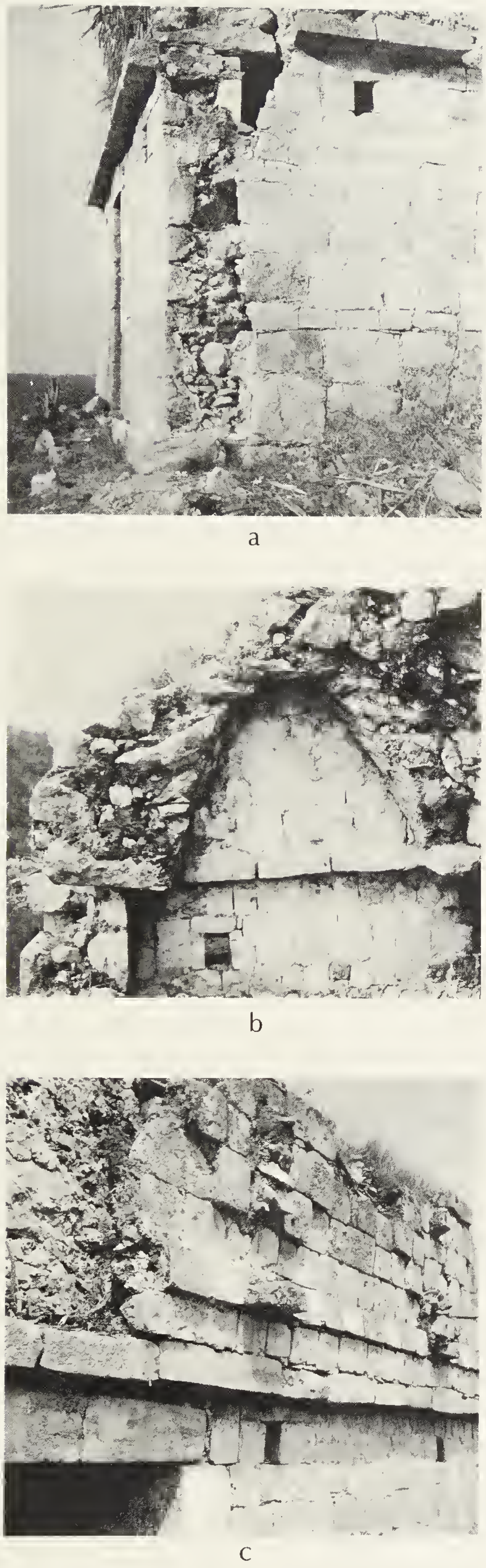


Figure 770. Cacabxnuc, North Group, North Building: a, southwest corner, looking north, and showing wall masonry, first course of medial moldings, and ventilator; b, south end of east room, showing wall and vault masonry and ventilator; c, remains of south facade near southeast corner, looking northeast, and showing decoration on upper facade.

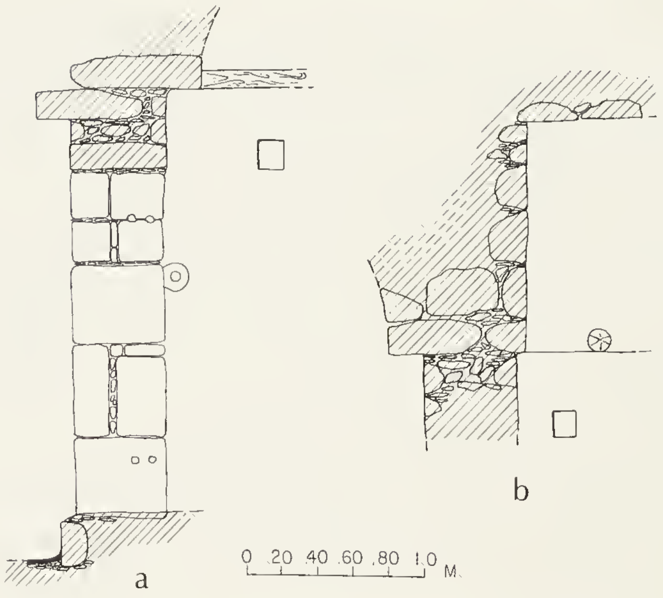


Figure 771. Cacabxnuc, North Group, North Building: a, section through west doorway and elevation of north jamb; b, section through east end of vault of south room.

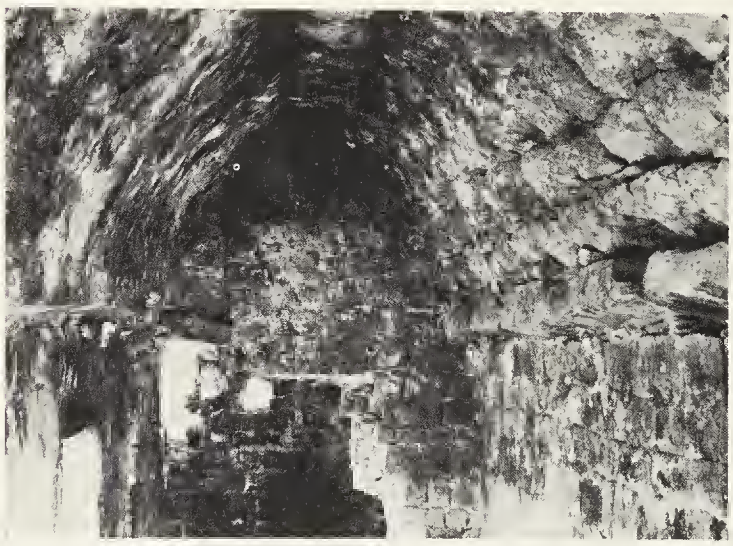


Figure 772. Cacabxnuc, North Group, North Building. View of south room, looking west through gap in wall into west room.

dressed stone (figs. 770b, 771b). Rough outer face of masonry shows vaults built prior to application of upper facade (figs. 766, 768). Two beams, one at each end of room, had been in spring course, and one beam at center of room about .20 m below capstones (fig. 768).

Moldings. Medial molding of two simple rectangular members, the lower one made of two courses (figs. 768, 769, 770). Only lowest member of cornice molding remains (fig. 768); complete molding probably as shown in elevation drawing (fig. 769).

Roof. Typical roof construction .36 m thick above underface of capstones (fig. 768). Some of plastered upper surface of roof preserved under debris from roof comb.

Roof Structure. Fragment of roof comb .90 m thick almost directly above medial wall (fig. 768). Faced with well-cut, dressed, and fitted stone like that of outer walls of building. Not known if roof comb was of perforated variety or what decoration it carried.

Decoration. Slightly raised panels in form of inverted stepped pyramids, on which were imposed seated human figures in modeled stucco, in upper facade zone at front (south) of building (figs. 766, 768, 769, 770c). Fragmentary remains indicate five such panels across south facade. Probably the same number on north facade, and three each on east and west ends of building.

Traces of red paint were noted on the underside of the medial molding and on the wall just below that molding. There were also traces of red on the lintel of the east doorway in the south room and of green on the lintel of the west doorway.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Two original doorways in north room secondarily blocked with masonry and new centrally located doorway cut through wall (fig. 767).

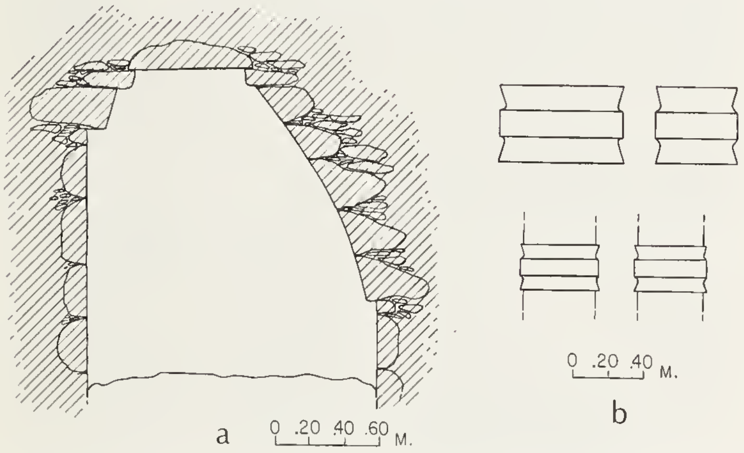


Figure 773. Cacabxnuc, South Group: a, section through passageway under stairway of two-story building; b, fallen capitals and shafts of banded rectangular columns.

SOUTH GROUPS

Perhaps 500 m southeast or south-southeast of the Central Group are two groups of buildings, one in the valley, the other on a hill, that seem to mark the southern limits of Cacabxnuc. Most of the structures are badly fallen.

The more westerly of the two groups is a courtyard assemblage of buildings in the valley. A standing doorway made with a single large stone for each jamb and a large well-cut and dressed stone lintel was noted. Doorway columns and finely cut and dressed wall stone were observed in the debris. Near the center of the court, on a small platform, was a badly weathered and broken sculpture of a seated human figure, of which only the back was preserved. It was reminiscent of Sculptures M2 and 3 at Xcalumkin (see p. 454, above).

A short distance east of the ruins in the valley are the remains of what had been a structure of two stories. Only the vaulted passage under the stairway to the second story shows any amount of standing masonry (fig. 773a). The wall facing is of well-cut and fitted stone. Vault stones are very well finished and of semispecialized and nonspecialized varieties. Banded split columns from the upper facade zone were seen fallen in the building debris.

Just north of the two-story structure we observed the fallen capitals and parts of the shafts of what seem to have been rectangular banded doorway columns (fig. 773b; and cf. Kiuic, fig. 601).

Haltunsil

ETYMOLOGY

haltun, rock basin of water, well in living rock (Martinez 1929, p. 370); *sil,* an unidentified palm (Roys, personal communication).

SITUATION

Approximately 4 km south by east of Cumpich, 2.5 km south of Cacabxnuc, and about 4 km east of Xcalumkin.

TOPOGRAPHY

Ruins located on top of high hill.

WATER SUPPLY

No natural permanent water supply known (but see Xcalumkin and Cumpich cenotes, pp. 419, 456). Two chultuns observed. Wells in Cumpich are nearest modern supply of water.

MAP

Only sketch map given here (fig. 774).

SIZE

Single group of four structures outlining an area about 300 by 600 m all that is known.

CIVIC PLAN

Courtyard group on leveled hilltop. May be outlying group of some larger unknown site.

HILLTOP GROUP

Top of hill leveled and structures arranged to form a court open on its north side (fig. 774). Primary approach to group presumably from the north. Two well-preserved chultuns found in court.

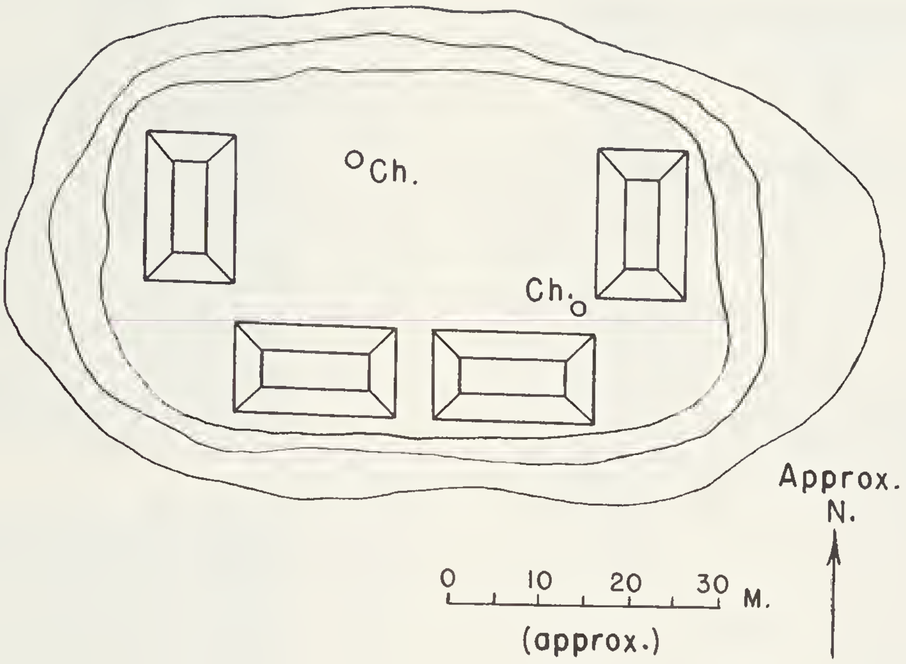


Figure 774. Haltunsil. Sketch map of ruins.

All buildings fallen and only fragments of masonry seen. Small section of standing wall shows facing of well-cut, dressed, and fitted stone. Large well-cut and faced full-width jamb stones from doorway and well-cut and faced stone lintels. Fragment of vault built of well-cut and dressed stone in keeping with wall masonry. No moldings or decoration observed.

Haltunchon

ETYMOLOGY

haltun, rock basin of water, well in living rock (Martinez 1929, p. 370); *chon* probably is *ch'om,* black vulture (*Catharista urubu* Vieillot; see Roys 1931, p. 332). Roys (personal communication) suggests the name should be Haltun-ch'en, *ch'en* meaning well or cenote. Our native laborers, however, translated the second part of the name as *zopilote* or turkey buzzard.

SITUATION

About 1 km north-northwest of Cumpich and 1 km or a little more south of Tzocchen.

TOPOGRAPHY

Hilly terrain with ruins located on hills and in valleys.

WATER SUPPLY

No known present-day water source at site. No chultuns observed but probably are there (and see Cumpich cenote, p. 456). Nearest modern water supply is at Cumpich and at Tzocchen.

SIZE

Site consists of small courtyard group on top of steep hill, scattered mounds at northern foot of hill, and small mounds on nearby hill. A small site as currently known.

CIVIC PLAN

None obvious, and one wonders whether these small ruins are outlying groups of some larger site.

Orientation. Only building on which fairly accurate observation was possible faced 11°30′ south of east.

HILLTOP GROUP

Small courtyard group on top of steep hill. Relatively well-preserved building on west side of court, and fallen vaulted structures on south and east sides. Principal approach to group probably from north, on which side there are some mounds at foot of hill.

West Building

Two-room structure that faces east on court.

SUPERSTRUCTURE

Plan. See figure 775a.

Section. See figure 775b.

Base Molding. Simple course of faced stone .16 m high and projecting .04 m from face of wall.

Walls. Thin. Front wall .52 m thick at doorjambs, end walls .54 m thick, rear wall .55 m, central transverse wall .64 m thick. Outer and inner facing of fairly well-cut and fitted stone (fig. 777a, b).

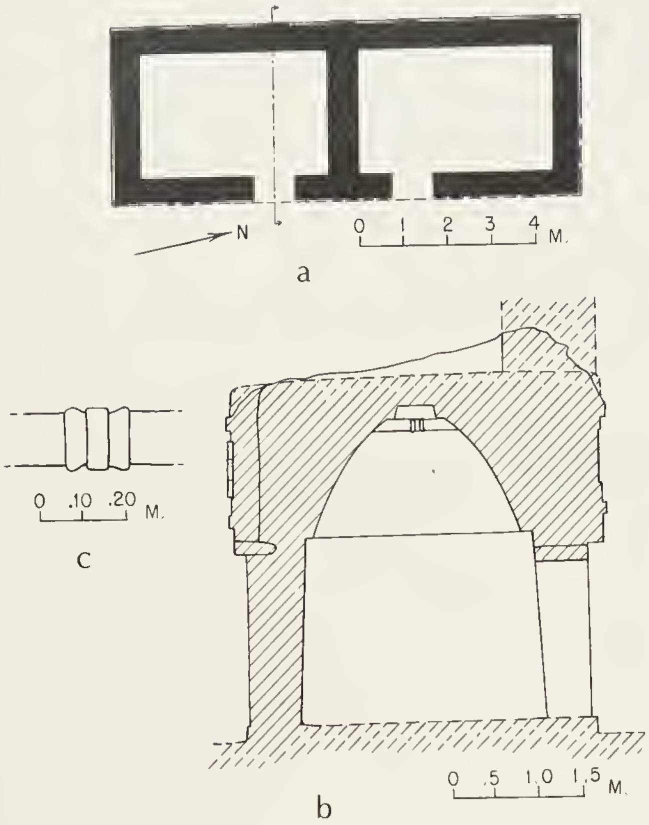


Figure 775. Haltunchon, Hilltop Group, West Building: a, plan; b, transverse section through south room; c, detail of carved stone vault beam (see fig. 777c).

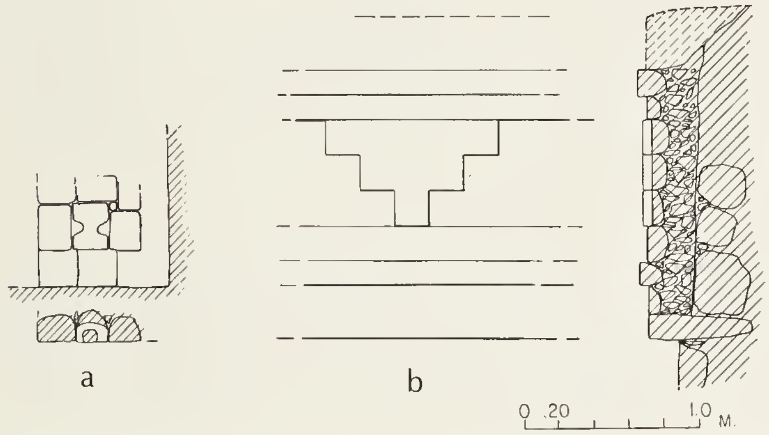


Figure 776. Haltunchon, Hilltop Group, West Building: a, detail of cordholder in north room; b, elevation and section of part of frieze on west facade (see fig. 777a).

Doorways. Jambs made of cornerstones and wall stones. Stone lintels.

Wall Openings and Depressions. Windows or ventilators .15 m square in front, rear, and end walls just below medial molding.

Cordholders of one-hole and of tongue-at-corner-of-stone types (cf. figs. 146a, 197a, 209a, 234a). Less usual variety of cordholder of dumb-sheave type (fig. 776a) just above floor and next to south jamb of doorway in north room.

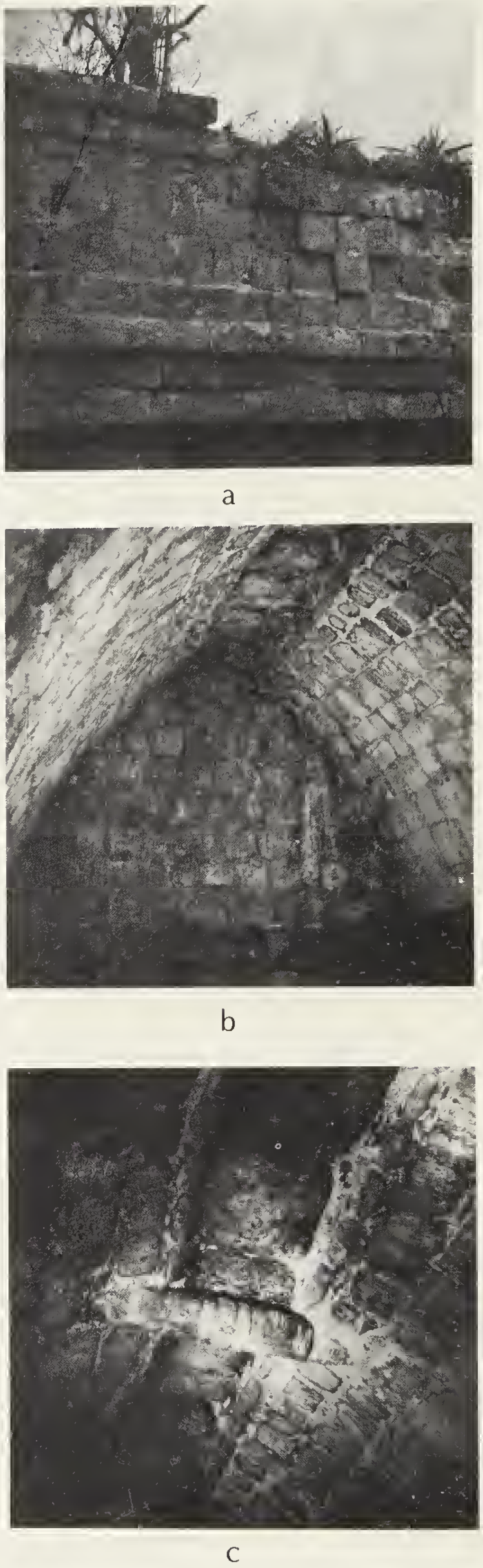


Figure 777. Haltunchon, Hilltop Group, West Building: a, moldings and decoration on west facade; b, vault of north room, looking north; c, carved stone beam at top of vault in south room.

Vaults and Beams. Well-faced, fairly well-cut and fitted vault stone (fig. 777b). None seen in section but probably of semispecialized varieties.

Two beam sockets at level of spring of vault near each end of north room. A most unusual stone beam, banded with common spoollike design, located near top of vault at center of south room (figs. 775c, 777c).

Moldings. Medial molding of three rectangular members, the lowest made of two courses of stone (figs. 776b, 777a). Only two lower members of cornice molding preserved—each a simple rectangular member—but probably completed by a vertical upper member of one or two courses of stone.

Roof Structure. Remnant of flying facade above front wall of building. Foot of rear (west) face of flying facade all that remains (fig. 775b) and do not know if it was of perforated variety or not. Flying facade seems to have been very heavy (i.e., thick) relative to wall below, so probably perforated to save weight.

Decoration. Slightly raised panel of inverted stepped pyramid, similar to that seen at Cacabxnuc (see figs. 769, 770c), in upper facade zone (figs. 776b, 777a). Three such designs spaced across rear (west) facade and presumably same number across front. Each end of building probably had one such panel.

Banded stone vault beam in south room (see Vaults and Beams, above).

Underside of medial molding once painted red, and traces of red paint on the two moldings and on upper facade. Band of hieroglyphs .10–.13 m high, painted in red in cursive style, just below medial molding. Little left of glyphs and a 6 Ahau is all that was recognized. A solid red band was painted below glyphic band. Red of hieroglyphs seemed somewhat lighter than that on underside of molding or on band below glyphs.

Tzocchen

ETYMOLOGY

Roys writes (personal communication) that the word *tzoc* is practically absent from Yucatec Maya and suggests *dzocchen. dzoc,* end or finished; *ch'en,* well. He also notes there is record of a hacienda in Campeche named Dzotchen. *dzot,* cram into a small hole; *ch'en,* well.

SITUATION

Some 2 km or a little more north by west of Cumpich and 1 km plus north of Haltunchon.

TOPOGRAPHY

My memory is that the site occupies generally hilly terrain, but I am not certain of this, and my notes make no mention of the topography.

WATER SUPPLY

No known natural water supply at site (but see Cumpich cenote, p. 456). Chultuns not observed but undoubtedly present. Modern well at hacienda of Tzocchen.

SIZE

Not known, but probably a good-sized site.

CIVIC PLAN

Not known.

HACIENDA GROUP

The hacienda of Tzocchen is situated in the midst of a large group of ruins. As the ruins have been quarried to provide stone for the construction of the hacienda, little remains of the ancient architecture. I saw no standing building or even fragments of masonry, but only mounds.

Several plain altars of typical Puuc design were observed and a sculptured stone (M1, below) in a stairway of the hacienda was photographed.

MISCELLANEOUS SCULPTURE

M1. Incomplete panel of hieroglyphs carved in bas-relief (fig. 778). Carving measures .63 m high, .32 m wide, not including border, and stone is .15 m thick. Built into stairway of main house of hacienda.

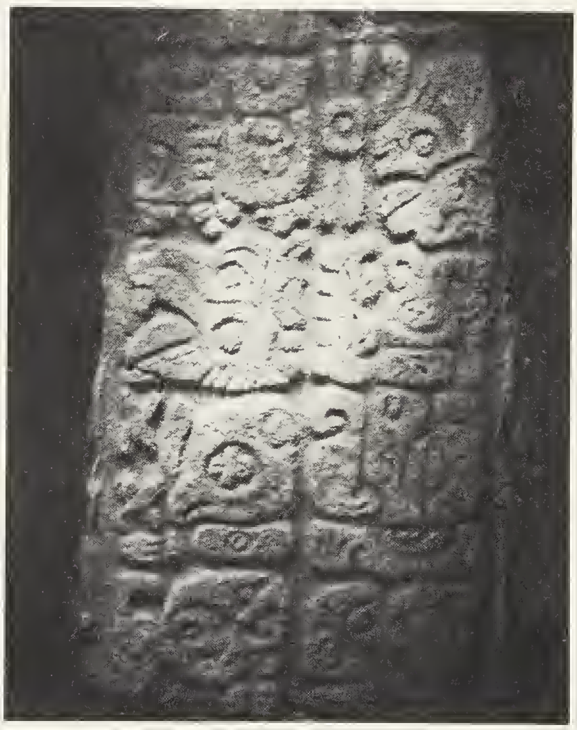


Figure 778. Tzocchen. Miscellaneous sculpture, M1, panel of hieroglyphs.

Chelemi

ETYMOLOGY

Roys (personal communication) suggests that the name is Chelemil. *ch'elem,* wild henequen; *ch'elemil,* place of the wild henequen. He adds that the word could be *ch'elemci,* another name for the same plant (see Roys 1931, p. 234).

SITUATION

About 5 km north-northwest of Cumpich and a little under 3 km northwest of Tzocchen.

TOPOGRAPHY

Most of site located on relatively level ground but at least one group of buildings on hilltop.

WATER SUPPLY

No natural water source known (but see Cumpich cenote, p. 456). Many chultuns. Nearest modern water supply from wells at Tzocchen hacienda and San Pedro Ranch (see below).

SIZE

Widely spaced groups of structures over an area somewhat more than .5 km in each direction. No very large buildings observed, but our exploration was cursory.

CIVIC PLAN

No map of ruins and plan not known. Site seems to consist of isolated groups with courtyard arrangement of structures a prominent feature.

Orientation. Fairly accurate observations possible on only two structures (Building with Paintings, Building with Stepped Vaulting) which faced, respectively, 41°30′ south of east and 10°30′ south of east.

GROUP OF BUILDING WITH PAINTINGS

Near the southern end of the site and about 30 m north of the road that runs from Dzitbalche to Tzocchen and Cumpich (1940) is a small courtyard with buildings on all four sides. The structure on the northwest side of the court, the Building with Paintings, is the best preserved at the site (fig. 779). Across the court, on the southeast side, is a badly fallen building whose remains show it to have been built of an exceptionally fine variety of masonry. Great beautifully-cut and finished wall stone, about 1 m in height and of varying width, are seen in the debris along with huge, equally well-finished cornerstones, full-width jamb stones, and lintels. The stone work is comparable to advanced Puuc. Another fallen structure that employed masonry of similar quality is located about 10 m off the north corner of the Building with Paintings.

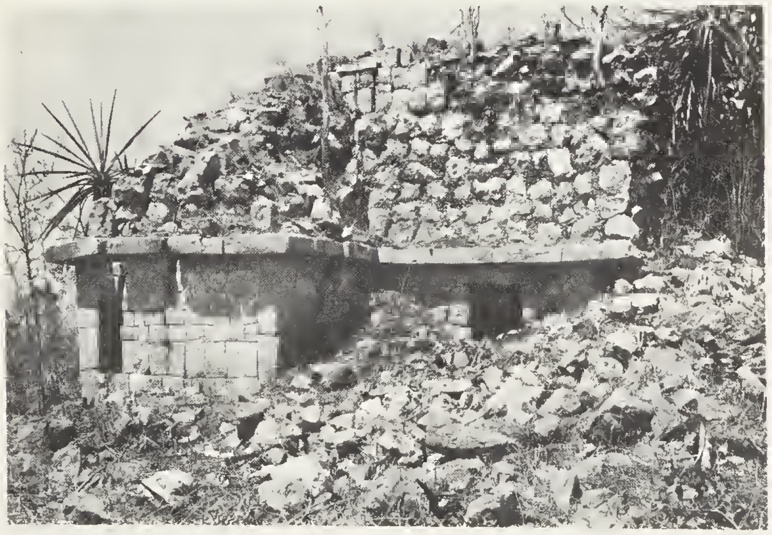


Figure 779. Chelemi, Building with Paintings. View from east. Note remains of roof comb at upper center.

Building with Paintings

A fairly well-preserved three-room building that occupies the northwest side of the court and faces southeast on the court.

SUPERSTRUCTURE

Plan. See figure 780a.

Sections. See figure 780b-d.

Base Molding. Simple course of dressed stone .22 m high and projecting .04–.05 m from base of wall (fig. 780b).

Floor. Remains of good hard floor of usual buff color. Traces of secondary floor .13 m above primary floor in southwest room (fig. 780c).

Walls. Outer walls and transverse inner walls .58 m thick; front wall of center room .71 m thick, probably owing to superimposed roof comb.

Outer wall facing of fairly well-cut, dressed, and fitted stone and large cornerstones (figs. 779, 780b, 781). Inner facing stone roughly cut and finished, very irregularly coursed, and with abundant use of spalls (fig. 782). Temporary building level beneath medial molding and one course below spring of vault clearly marked (fig. 780b).

Doorways. Jambs built of two vertical courses of cornerstones. Stone lintels.

Wall Openings, Depressions, and Projections. Small rectangular windows or ventilators about .15 m wide by .10 m high in southwest and southeast walls of southwest room, at level just below medial molding (fig. 780c, d). Presumably same arrangement in fallen northeast room.

Pair of two-hole cordholders at each side of center doorway (fig. 780c) and at each side of southwest doorway.

Stone peg .09 m long and .04 m in diameter circled by band of blue paint .12 m in diameter located high on southeast soffit of center vault (fig. 780c).

Vaults and Beams. Vault of almost square center room runs longitudinally to building (i.e., northeast-southwest) but ends of vault so pronouncedly sloped and arched (fig. 780c) as to give impression of vault springing from all four sides of room. Vault stone fairly well faced and fitted (fig. 782). None seen in profile but guess them to be only slightly specialized. Capstone span in center room .51 m

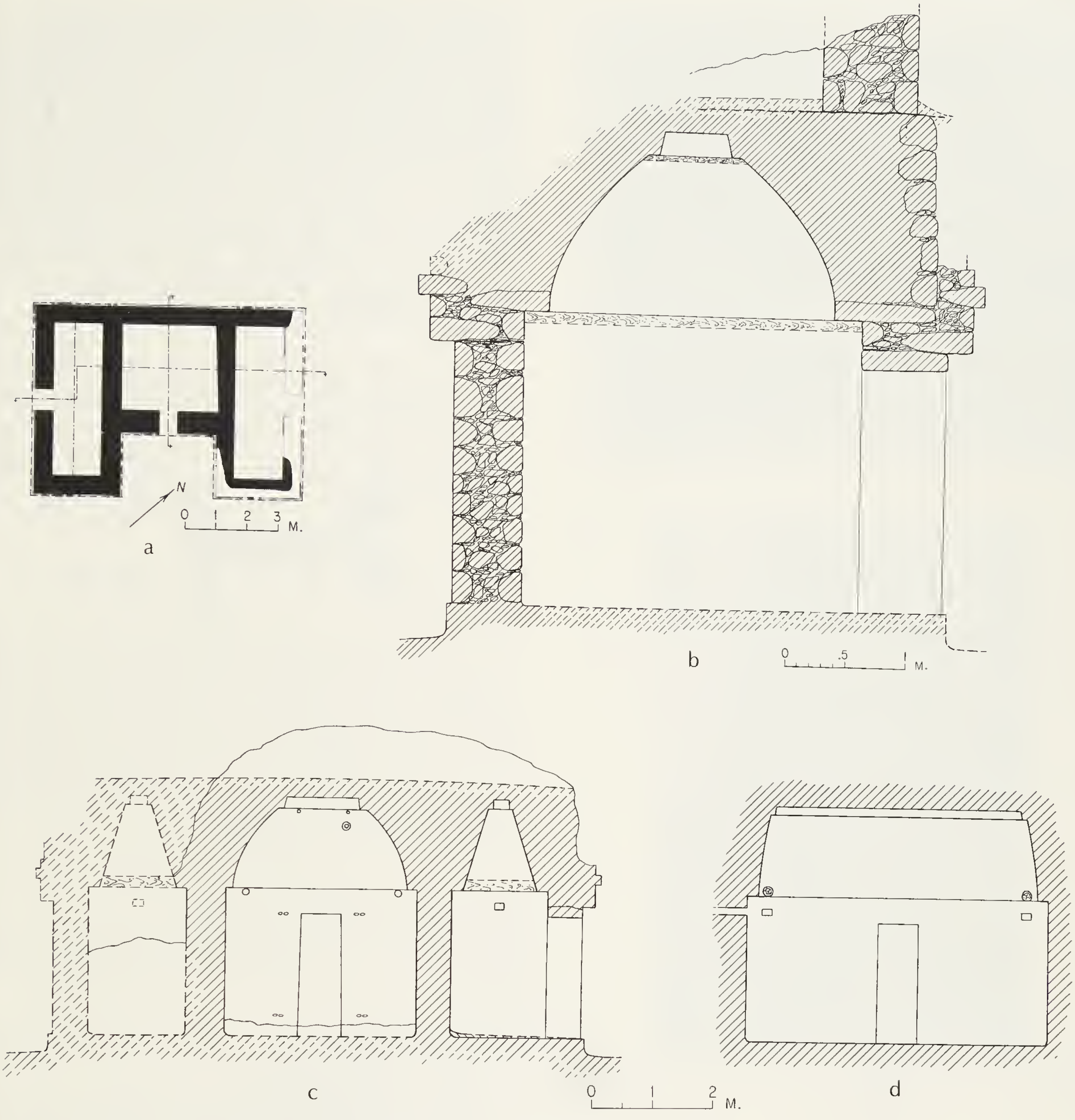


Figure 780. Chelemi, Building with Paintings: a, plan; b, transverse section through center room; c, northeast-southwest section; d, longitudinal section through southwest room.

(fig. 780b). Pronounced overhang both at spring of vaults and of corbels under capstones. Usual rough outer facing of vault masonry (figs. 779, 780b), later covered by now-fallen finished masonry of upper facade.

Beam sockets .10 m in diameter and just below spring at each end of center vault (fig. 780c). Small beam sockets .04 m in diameter just below corbels under capstones. Sockets for rather heavy beams .17 m in diameter at level of spring at each end of southwest room (fig. 780d).

Traces of wall painting on all standing vault soffits (see Decoration, below).

Moldings. Medial molding of three rectangular members, the lowest member built of two courses (figs. 780b, 781). No cornice molding standing, but probably like that on West Building of Hilltop Group at Haltunchon (see fig. 776b).

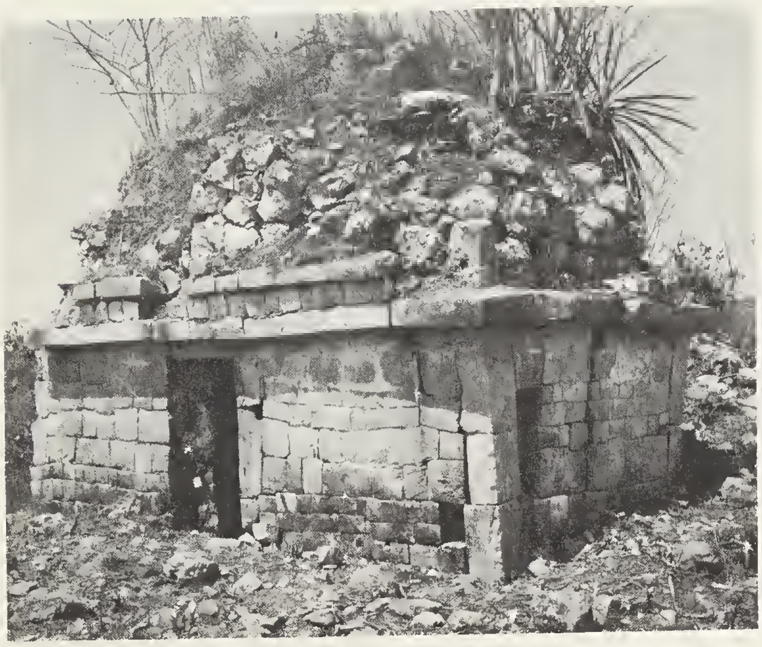


Figure 781. Chelemi, Building with Paintings. View from south.

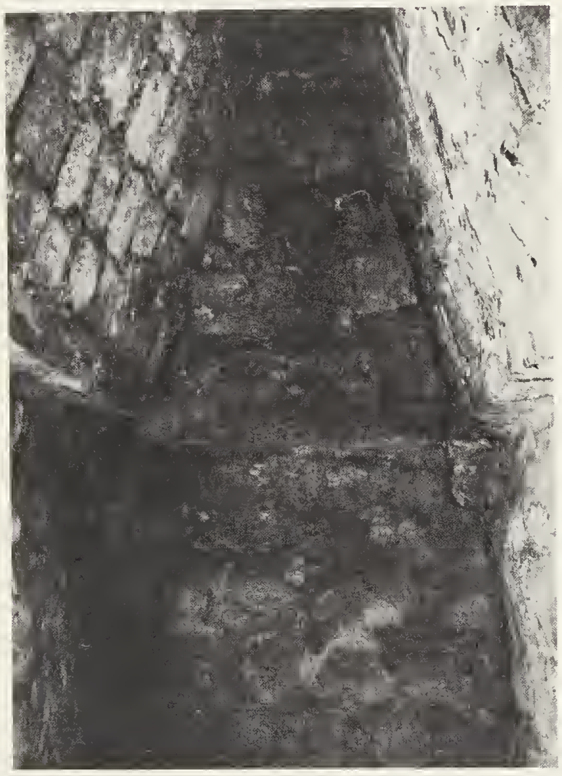


Figure 782. Chelemi, Building with Paintings. Northwest end of southwest room.

Roof. Fragment of finished roof .10 m above rough level on which roof comb rested.

Roof Structure. Roof comb or flying facade over front wall of center room (fig. 780b). Roof comb .77 m thick at base and faced with roughly cut and dressed stone (fig. 779). Height and length of roof structure not known, but apparently ran most of length of building. May or may not have been of perforated variety.

Decoration. None of upper facade standing and do not know what decoration it carried. No decorative elements noted in debris of building.

Traces of red paint on exterior walls and of yellow band under medial molding. Extremely fragmentary remains of wall paintings on vault faces of center room. Painting on vault of southwest room somewhat better preserved. Several human figures can be made out but the general scheme and subject of the scene is lost. At each end of the vault there seems to be depicted a bench or throne with two or more people seated on it and facing one another, (cf. Ruppert, Thompson, and Proskouriakoff 1955, figs. 27, 29). The throne is red with a blue border. Colors noted in the paintings are light and dark blue, green, yellow, red, purple, and flesh color brown.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Only secondary construction observed is trace of late floor in southwest room (fig. 780c). What might be taken for secondary roofing seems actually to be original finished roof surface, the stratum below it being the rough building level on which the roof comb was based (fig. 780b).

GROUP OF BUILDING WITH STEPPED VAULTING

About 200 m north and a little west of the Building with Paintings is another small courtyard with buildings on all four sides. The structures on the north, east, and south sides of the court, which were once vaulted buildings, are almost totally collapsed, and only the western building offered any worthwhile architectural information. Near the center of the courtyard is a badly weathered sculpture, too eroded to make out the subject.

Building with Stepped Vaulting

Partly standing three-room building on west side of court and facing east on court.

SUPERSTRUCTURE

Plan. See figure 783.

Section. See figure 784a.

Walls. Outer walls and transverse inner wall .57–.58 m thick; medial wall .90 m thick, presumably to support roof comb.

Exterior and interior facing comparable to that of Building with Paintings (see figs. 779, 781, 782); interior facing possibly somewhat better quality than that in other building (cf. figs. 780b, 784b). Temporary construction level, usually immediately below medial molding, is two courses below molding here.

Doorways. Stone lintels. I have no description of doorjambs.

Wall Openings. Small window or ventilator just below medial molding in north wall of east room.

Vaults and Beams. Stepped vaulting of roughly shaped slabs laid in heavy bed of mortar with abundant use of spalls and small stone for chinking (fig. 784a). Vaults step in at ends of rooms (fig. 784b) as well as at sides. Construction comparable to that seen at Structures 1B1, 3B1, 3B5 at Oxkintok (see figs. 480a, 501, 525, 528, 529) and at Xulmil (see fig. 580), but lower walls of different type masonry.

Seems to have been cross-beam at spring of vault at each end of each room (fig. 784).

Moldings. Only lowest course of medial molding remains in position (fig. 784b). Apparently part of a rectangular member.

Roof Structure. Roof comb .66 m thick at base rests over medial wall and presumably extended some distance over south room. Lower section of roof comb solid and topped by small rectangular molding at front (east) but not at rear (fig. 784a). Roof comb perforated above molding. Three tiers of windows standing. Original height not known. My notes do not mention character of masonry but I assume the roof comb to have been faced with stone like that on the lower walls of the building. No signs of decoration remain.

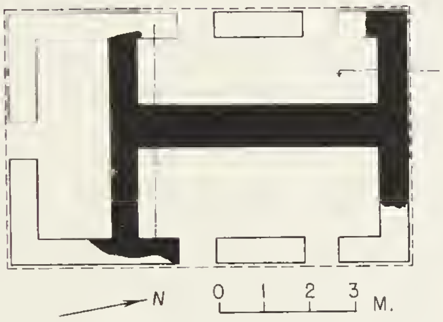


Figure 783. Chelemi. Plan of Building with Stepped Vaulting.

GROUP OF BUILDING WITH COLUMNAR DOORWAY

Approximately 200 m north of the Building with Stepped Vaulting is yet another courtyard arrangement of structures. All are badly fallen and only traces of masonry are visible. The building on the eastern side of the court once had at least one doorway employing a pair of columns. The columns seem to have been constructed of drums only .35–.50 m in height, much like the columns at Chichen Itza, and in contrast to common Puuc practice of employing relatively high column shafts.

Just north of this court is a small pyramid, possibly 10 m high, but with no trace of any superstructure visible. At the northern base of the pyramid a nicely shaped and finished column altar, .65 m high by .60 m in diameter, with a raised encircling band or molding (fig. 785a), rests on what may be the beginning of a causeway.

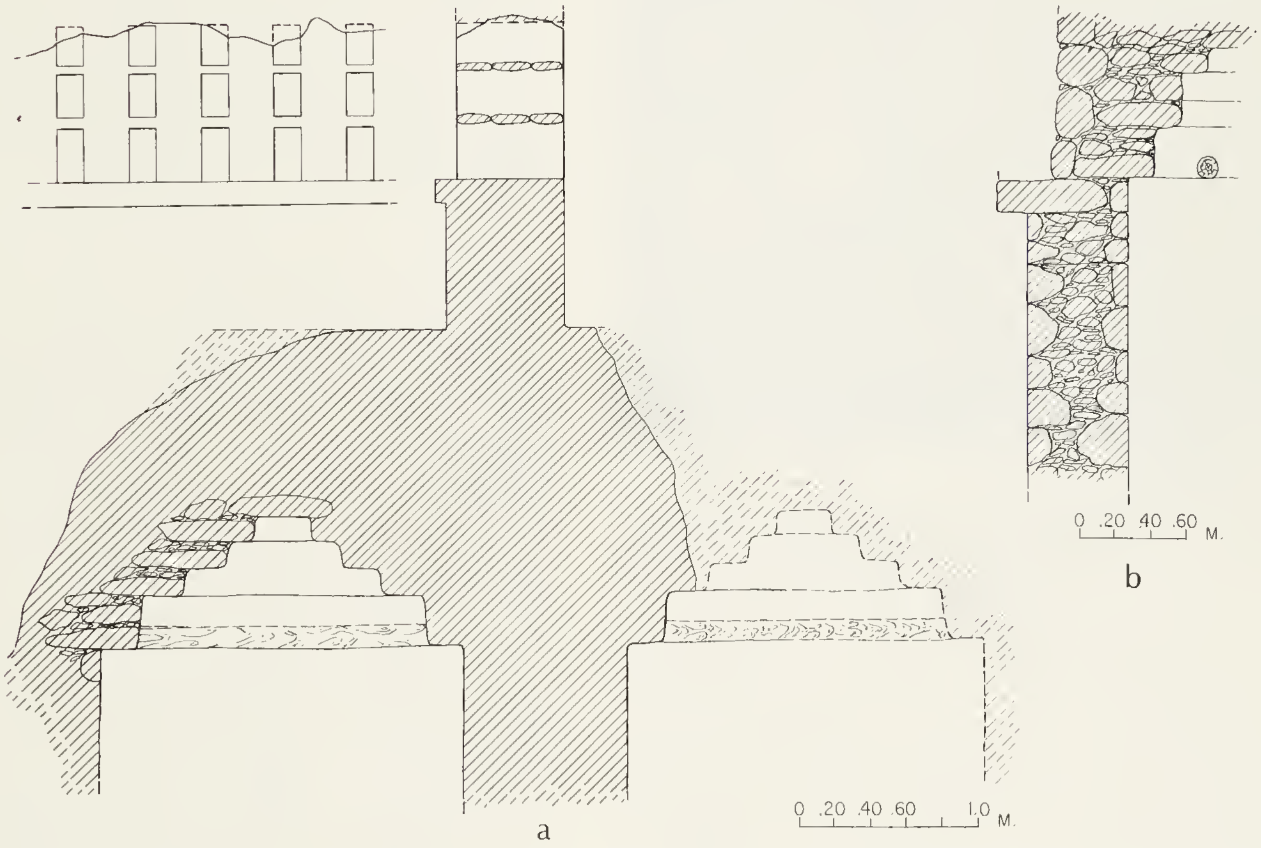


Figure 784. Chelemi, Building with Stepped Vaulting: a, east-west section through north rooms; be, detailed section of north wall and end of vault of northwest room.

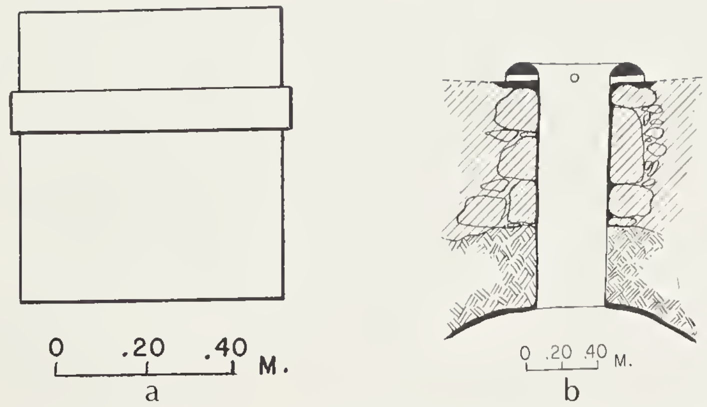


Figure 785. Chelemi. Miscellaneous features: a, altar in Group of Building with Columnar Doorway; b, detail of mouth and neck of chultun in East Group.

HILLTOP GROUP

Some 400 m north and a little east of the Building with Stepped Vaulting, and 200 m or a bit more from the Building with Columnar Doorway, a group of fallen structures occupies the top of a steep hill. Nothing of interest was observed there. The group seems to mark the approximate northern limits of Chelemi.

EAST GROUP

Approximately 600 m east and a little south of the Hilltop Group is a closed court surrounded by seven mounds that once were vaulted buildings. The area between this East Group and the other remains of buildings at the site was not explored, and there is some question whether the group should be considered to be part of Chelemi. As no other nearby ruin site is known, however, and as the location seemed to carry no local place-name, I am for convenience including these ruins with Chelemi.

Only the building at the southeast corner of the court presented any standing masonry. Two doorways were observed, one with a single column flattened on the sides, so common in this area, and another with each jamb made of a single finely cut and faced stone and a large finely cut lintel. Judging from the stone in the debris, the masonry of all buildings in this group was of well-cut, faced, and fitted stone, fairly large in size.

Five well-preserved chultuns were found in the courtyard here. They provided excellent examples of the characteristic construction of these flask-shaped cisterns. The neck above the circular perforation through the underlying bedrock was built up to court level with faced and fitted stone, the exposed surfaces nicely plastered (fig. 785b). The orifice is circled by a ring of plaster about .10 m high that is perforated by four small holes that allowed the water to drain into the cistern. This style of construction was undoubtedly more or less standard but preservation of the plaster ring, drain holes, and plaster lining of the neck is rare.

San Pedro, near Dzitbalche

NAME

No Maya place-name recorded. The site takes its name from a modern ranch located in the midst of the ruins.

SITUATION

Approximately 7 km north of Cumpich, 5 km north and a little east of Tzocchen, 3 km northeast of Chelemi, and about 10 km east-southeast of the railroad town of Dzitbalche.

TOPOGRAPHY

Region of hills and valleys with ruins located on valley floor and on hilltops.

WATER SUPPLY

No permanent natural water source known. Many chultuns. Modern water supply from well at ranch.

SIZE

Part of site explored by us covers an area about 1 km east-west and nearly as much north-south. Our explorations were largely restricted to trails, however, and we have little knowledge of the density of remains. We also know little of the area south of the ranch.

CIVIC PLAN

Exploration too limited to know plan of site. General arrangement seems to be common one in this area of more or less centrally located courtyard, groups of structures on valley floor, and outlying hilltop groups. Sporadic mounds and two small pyramids were also noted in the valley but not placed relative to other remains.

RANCHO SAN PEDRO

Judging from the well platform, corrals, and crumbling masonry walls, this sadly run-down (1940) cattle ranch had once seen better days. The ranch buildings, which are distributed around a small square or plaza, are built of stone from the ancient ruins. In front of the house of the mayordomo was lying a stone (M1) carved with hieroglyphs, another such stone (M2) was in front of a house across the plaza, and a third (M3) was found in a field wall (see Miscellaneous Sculpture, below). A sculpture of the head of a man (M4) was found in one of the corrals, and a phallic waterspout (M5) was built into a wall of the ranch (see Miscellaneous Sculpture, below). Elsewhere around the ranch we observed the spoollike elements from banded facade columns, one such piece carrying a triangular design (fig. 786), colonnettes from architectural moldings, and a wall (?) stone with the rather common plaited-mat pattern carved on it. The usual column altars were also seen.

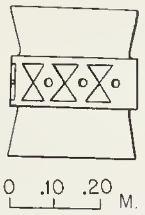


Figure 786. San Pedro. Fallen element from banded facade column.

MAIN GROUP

What seems to have been the most important part of the site is a completely fallen group of structures, undoubtedly quarried for stone for the modern buildings, just west of the ranch plaza. No building appeared to be standing, and the ruins were passed over without detailed examination.

East Building

About 300 m east and a little north of the ranch is a fairly well-preserved building of the same general plan as the Building with Paintings at Chelemi (see fig. 780a). The San Pedro building, however, faces west toward the Main Group, and the central room is of normal proportions instead of the almost square center room of the Chelemi structure. Walls are relatively thin, .50–.52 m thick, and are faced with moderately well-cut and fitted stone that tends to be smaller than usual. Doorjambs are made of two vertical courses of cornerstones and support stone lintels. A small rectangular window or ventilator penetrates the west wall of the north wing just below the medial molding and there is a niche on the facade just above the molding (fig. 787). There probably were three such niches across the western facade of the central room and another on the west facade of the south wing. Vaults are built of moderately well-faced and fitted stones, in keeping with the wall facing, and also somewhat smaller than usual. The medial molding is of three rectangular members. No cornice molding remains in position.

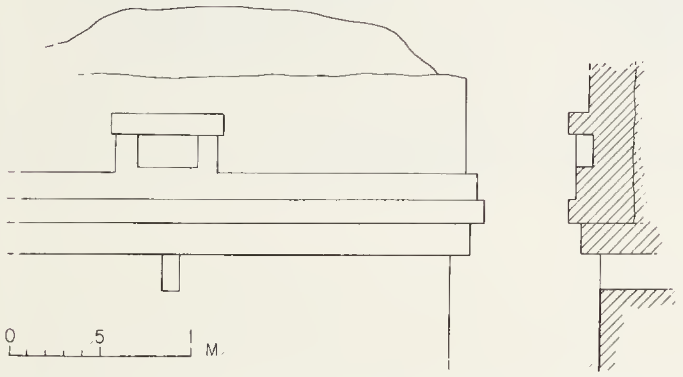


Figure 787. San Pedro, East Building. Elevation and section of medial molding and niche on west facade of north wing.

NORTH HILLTOP GROUP

Approximately 800 m north-northwest of Rancho San Pedro, on top of a steep and rather high hill, is a group of totally fallen buildings. In the building debris we found two badly burned and weathered doorway columns carved on the front with human figures in high relief (fig. 788; and see Proskouriakoff 1950, fig. 98f), quite like the high-relief columns at Oxkintok and Xcochkax (see pp. 303, 394; and see Proskouriakoff 1950, pp. 167–168, and 1951, p. 115, for discussion and possible date of sculpture). One column (shown by Proskouriakoff 1950, as fig. 98f) measured 1.65 m high by .45 m in diameter, the other (fig. 788) 1.68 m high by .48 m in diameter. Also in the debris were the weathered fragments of a doorjamb, .47–.48 m wide by .23–.25 m thick, with a standing human figure in low relief on the face of the jamb (fig. 789a; and ibid., fig. 98e, and p. 168) and a column of glyphs on the edge (fig. 789b, c). Lastly, what appeared to be the capital from a doorway column, .22 m high, .73 m wide, and .54 m deep, was carved on the front with the shoulders, arms, and breasts of a winged female figure (fig. 790). Judging from the debris, the masonry of this group seems to have been of the relatively large, well-cut and faced wall stone, full-width jamb stone, and large well-cut stone lintel variety.

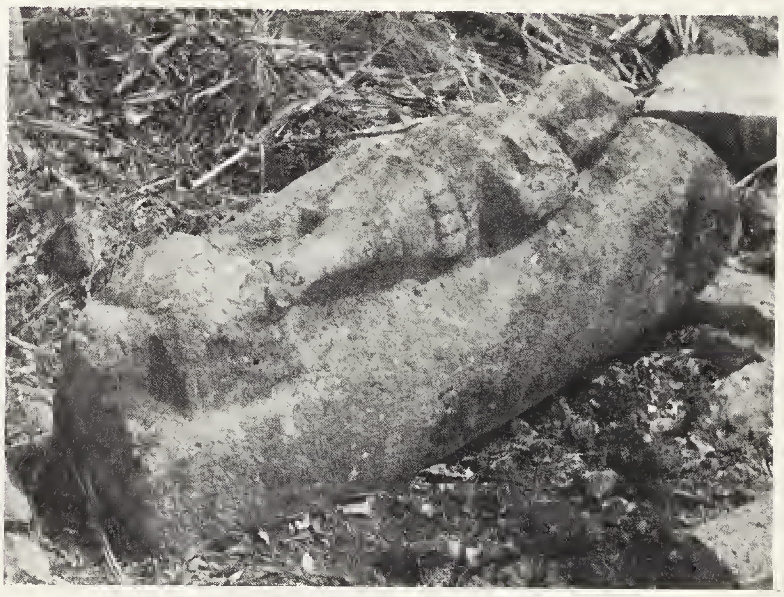


Figure 788. San Pedro, North Hilltop Group. One of two fallen sculptured columns (see Proskouriakoff 1950, fig. 98f, for other column).

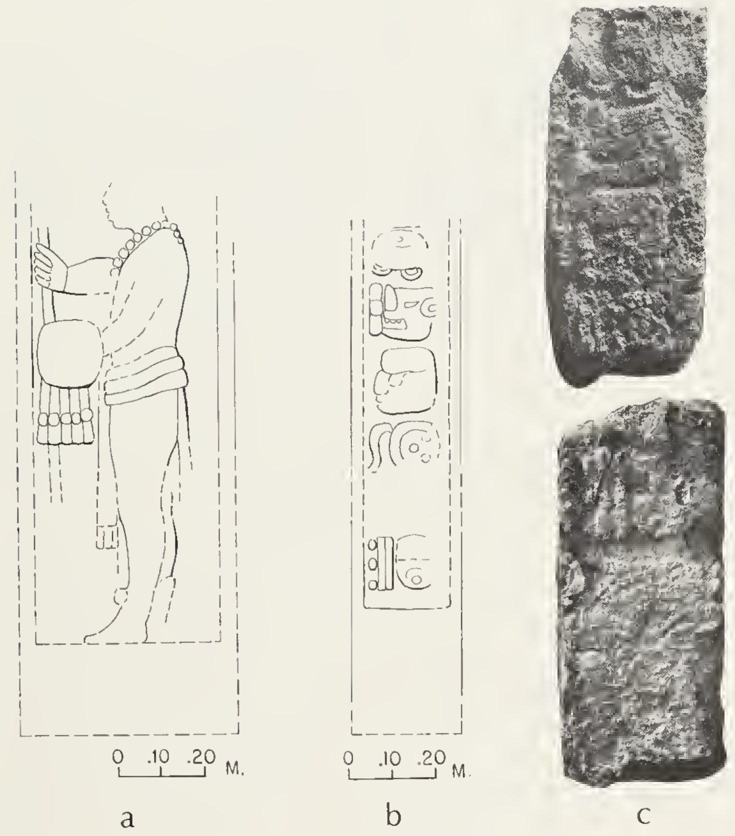


Figure 789. San Pedro, North Hilltop Group. Fragments of sculptured doorjamb: a, face of jamb; b, c, edge of jamb.

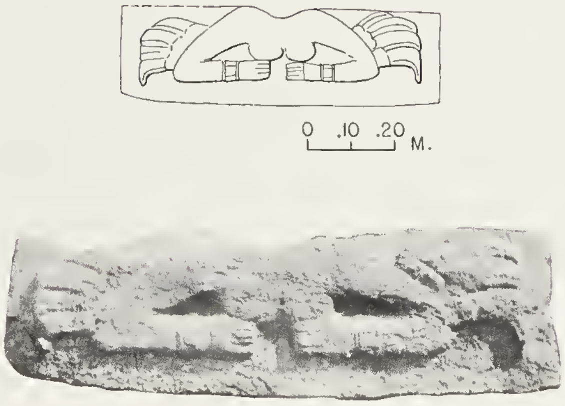


Figure 790. San Pedro, North Hilltop Group. Fallen capital from doorway column.

WEST HILLTOP GROUP

Some 700 m west-northwest of the ranch, and possibly 500 m southwest of the North Hilltop Group, on top of a steep and even higher hill than that of the other group, is a badly fallen assemblage of structures, among which is one partially standing building. It faces east toward the Main Group. The masonry is of large well-cut, faced, and fitted wall stone, full-width jamb stones, and large well-cut stone lintels. The medial molding carried colonnettes in one member.

West Building

Approximately 500 m west-northwest of Rancho San Pedro and about 50 m east of the base of the hill that supports the West Hilltop Group are the remains of a building that collapsed in such a way that a large portion of the upper facade fell as a unit, the medial molding, frieze, and cornice molding remaining intact, except for the coping course (fig. 791). The coping course was probably the usual outward-leaning member seen so frequently on Puuc buildings. The upper wall zone, or frieze, was decorated by panels of three split columns separated by plain areas. The masonry was of large well-cut and fitted stone.

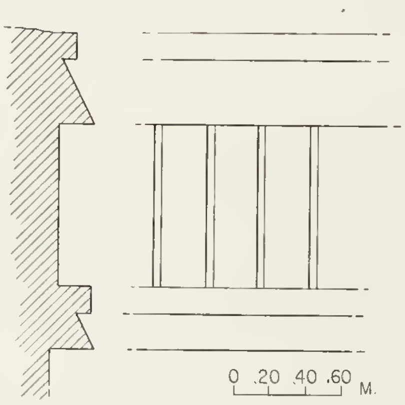


Figure 791. San Pedro, West Building. Section and elevation of fallen segment of moldings and frieze.

MISCELLANEOUS NOTES

A square or rectangular pillar with a three-member molding (cf. Cumpich, p. 457, and Cacabxnuc, p. 462) was seen but not measured, nor was the provenience recorded. No elements of facade masks were observed anywhere at the site.

MISCELLANEOUS SCULPTURE

M1. Stone with fragmentary hieroglyphic inscription carved in bas-relief (fig. 792a). Sculpture measures .54 m high, .25 m wide, .25 m thick. Found in front of house of mayordomo on plaza of Rancho San Pedro.

M2. Stone with fragmentary hieroglyphic inscription carved in bas-relief (fig. 792b). Sculpture measures .45 m high, .25 m wide, .25 m thick. Found in front of house across plaza from Sculpture M1 (see above).

M3. Stone with fragmentary hieroglyphic inscription carved in bas-relief (fig. 792c). Sculpture measures .64 m high, .29 m wide, .30 m thick. Found in field wall near plaza of Rancho San Pedro.

M4. Human head of stone carved in high relief (fig. 792d). Maximum height .75 m, maximum width .31 m, maximum depth .48 m. Found in corral at Rancho San Pedro.

M5. Phallic waterspout of stone (fig. 792e). Measurements were not recorded. Set into modern wall at Rancho San Pedro. Sculpture may have served same function as phallic waterspout on Phallic Temple at Uxmal (see p. 262).

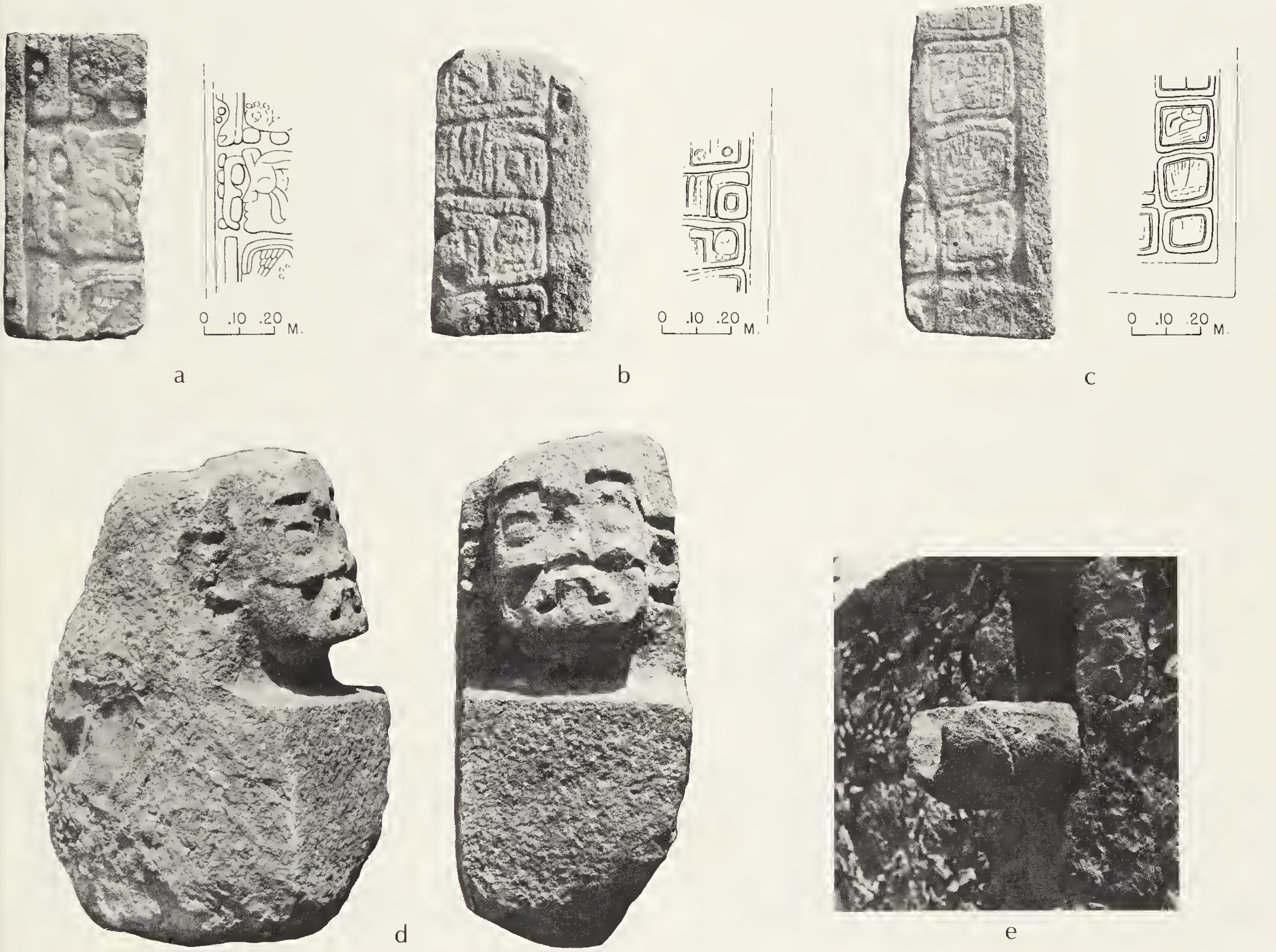


Figure 792. San Pedro. Miscellaneous sculpture: a, M1, stone with glyphic inscription; b, M2, stone with glyphic inscription; c, M3, stone with glyphic inscription; d, M4, human head of stone; e, M5, phallic waterspout of stone.

Ichmac

ETYMOLOGY

Obscure. Roys (personal communication) says *ich* can mean eye, more rarely face, and in plant names in or among; *mac* is a cover or stopper. He goes on to say that *mak* is the name of the pond-apple (see Roys 1931, p. 263, *H-maak*) and suggests *ich-mak,* among the pond-apple trees, as the name of the ruins. The relatively dry terrain of inland northern Campeche seems an unlikely spot for the pond-apple, or annona, to be growing.

SITUATION

About 4 km or a little more northeast by east of Cumpich and slightly smaller distance east of Tzocchen.

TOPOGRAPHY

Site is bordered on the south by the savanna of Ichmac, from which the ruins take their name. There is no mention in my notes of the topography here, but my memory is of relatively level terrain with the ruins situated on low rises.

WATER SUPPLY

No natural water source known (but see Cumpich cenote, p. 456). Many chultuns in ruins. Modern wells at old hacienda, now village, of Chacnichen, 2–2.5 km northeast of Ichmac, and at Cumpich and Tzocchen.

SIZE

Our explorations found ruins over a distance of about .5 km east and west and an undetermined distance north and south. I received the impression of a fairly large site and the remains may well extend 1 km in either direction.

CIVIC PLAN

Not known in any detail. Groups of structures seem to be dotted about without apparent relation to one another, in typical Puuc fashion, but there is some stress on the courtyard arrangement and more compactness of contiguous and apparently connecting courts than is usual at sites of the eastern Puuc region.

Orientation. Compass observation on only one building, which faces 12°30′ south of east.

CENTRAL AREA

No standing buildings were seen in what appeared to us to be the central part of the site. Well-cut full-width jamb stones protruded from the debris of fallen structures, and we examined a court with fallen buildings on three sides and five well-preserved chultuns in the court, but worthwhile architectural detail was on the whole lacking.

EAST GROUP

Near the eastern limit of our exploration is a large group of badly fallen structures that surround a court. On the east side of the court is a pyramid 12–15 m high that undoubtedly faced west and it is fair to assume that the orientation of the group was toward the west, and that the primary approach was from that direction. In the court and across the front of the pyramid is a north-south line of three small altars, probably of the column variety, but no measurements were taken.

A badly fallen temple, apparently consisting of at least a front and a rear chamber, rests at the top of the pyramid. Only the well-cut full-width jamb stones of what seemingly was a doorway through the medial wall of the once-vaulted building are in position and visible, but well-cut and faced stone is seen in the debris.

On the south side of the court before the pyramid is a fallen structure with a large depression at the north end where some one has excavated and exposed a buried vault. The capstones of the vault were removed in ancient times and the whole chamber filled with stone, presumably to support the later, superimposed construction. Enough of the vault can be seen to show it to be of the stepped variety, built of crude overhanging slabs and similar to vaulting seen at Chelemi (p. 469, above) and at Oxkintok. Since the walls that support the vault are not visible without excavation, it is not known whether the masonry is of relatively well-cut and faced stone, as at Chelemi, or of the cruder workmanship seen in the early period architecture at Oxkintok.

WEST GROUP

Approximately 400 m west of the East Group is an assemblage of structures around two courts aligned on an east-west axis. The eastern court is open to the east, in which direction the group seems to face, and from which side the primary approach must have been; the west court is closed on all sides, and the building on the east, which faces both east and west, is shared by both courts.

The structure on the north side of the east court is completely fallen; structures on the south and west are partly standing. The building on the west side of the east court is a large two-story structure with stairways to the upper story on both the east and west sides, thus being approached from either court. The bottom story consisted of a double range of rooms facing east and a single range facing west. The second story is too badly fallen to determine whether there was more than a single range of rooms.

Arranged in line (north-south) in the east court are three plain column altars. The northern one is of normal size; the central and southern monuments are tremendous stones.

Center Altar. Plain (fig. 793a). Height 1.10 m; diameter at top 1 m, at bottom .80 m. Resting on small rectangular platform. I have no further notes on this column altar.

South Altar. Plain (fig. 793b). Height 1.18 m; diameter at top 1.05 m, at bottom .85 m. Slight curve on sides (i.e., barrel shaped). I have no other notes on this column altar.

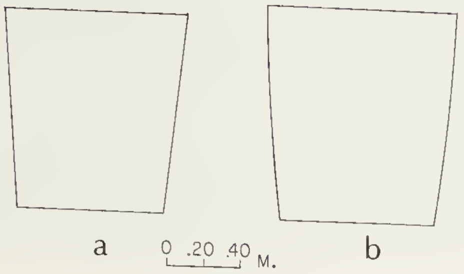


Figure 793. Ichmac, West Group. Profiles of altars in east court: a, center altar; b, south altar.

As already mentioned, the west court is enclosed by buildings on all four sides. The building at the east is the structure located on the west side of the east court that has just been described. The north and south buildings are fallen, but it is possible to tell from the debris that a two-column doorway had formed one entrance to the southern structure. On the west side of the court is another large two-story building that faces east on the court and toward the center of the site. This is the Building with Paintings described below. Near the center of the court is a small rectangular platform supporting another huge round monolithic altar.

Building with Paintings

This large, two-story structure, which occupies the west side of the west court in the West Group, and faces east, is considerably fallen, but presents enough standing and exposed masonry to provide a partial plan (fig. 794) and some architectural detail. It was not possible to determine without excavation whether the western part of the building, on which the second story rests, was solid masonry or a core of masonry surrounded by rooms facing north, south, and west.

SUPERSTRUCTURE

Plan. See figure 794.

Construction. Central stairway at east led to second story. No steps now visible. Passage under stairway, roofed by half-vault (figs. 795, 796), gave access to center room of lower story. Front and end walls of first story .65 m thick; northern and southern inner transverse walls also .65 m thick; transverse walls at each end of center room of first story over 1 m thick. Longitudinal walls of second story apparently about .65 m thick, transverse walls .75–.80 m thick. Very little exterior wall facing showing; interior facing of only roughly cut, faced, and fitted stone with considerable use of spalls between stones (fig. 797a). Doorways built of finely cut, shaped, and fitted specialized jamb stones and large well-finished stone lintels (figs. 795, 796). Three cordholders of tongue-at-side-of-stone variety (fig. 796a) on inner wall at each side doorway. Bench across north end of center room (fig. 794). Vaults made of only fairly well-faced stone, rather poorly

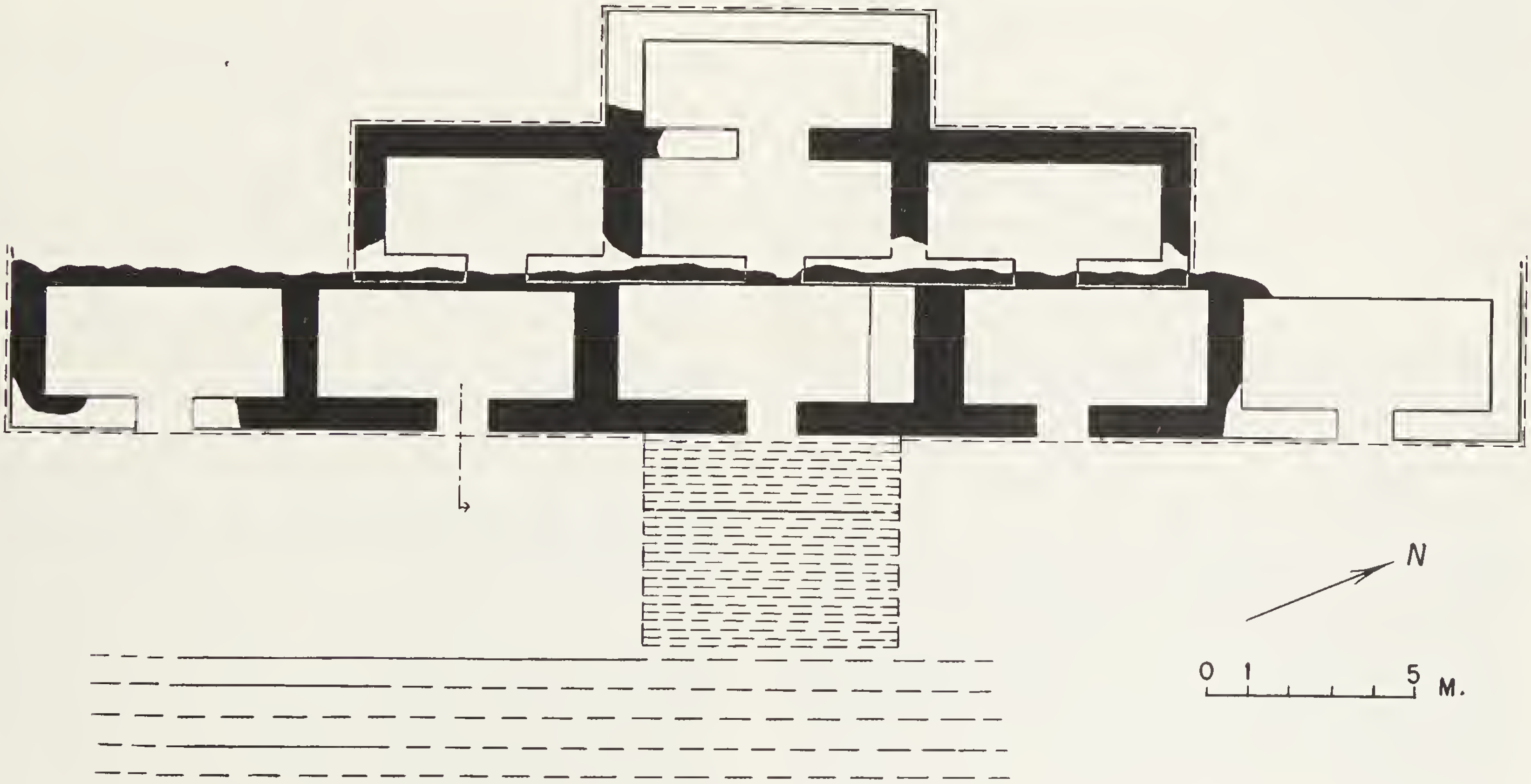


Figure 794. Ichmac. Plan of Building with Paintings.

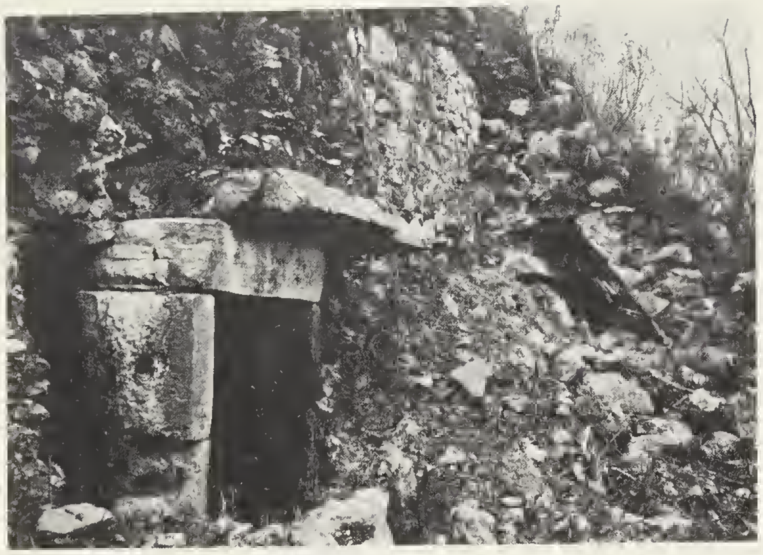


Figure 795. Ichmac, Building with Paintings. Doorway to second room from south of first story, looking north, and showing vault of passage under stairway in background.

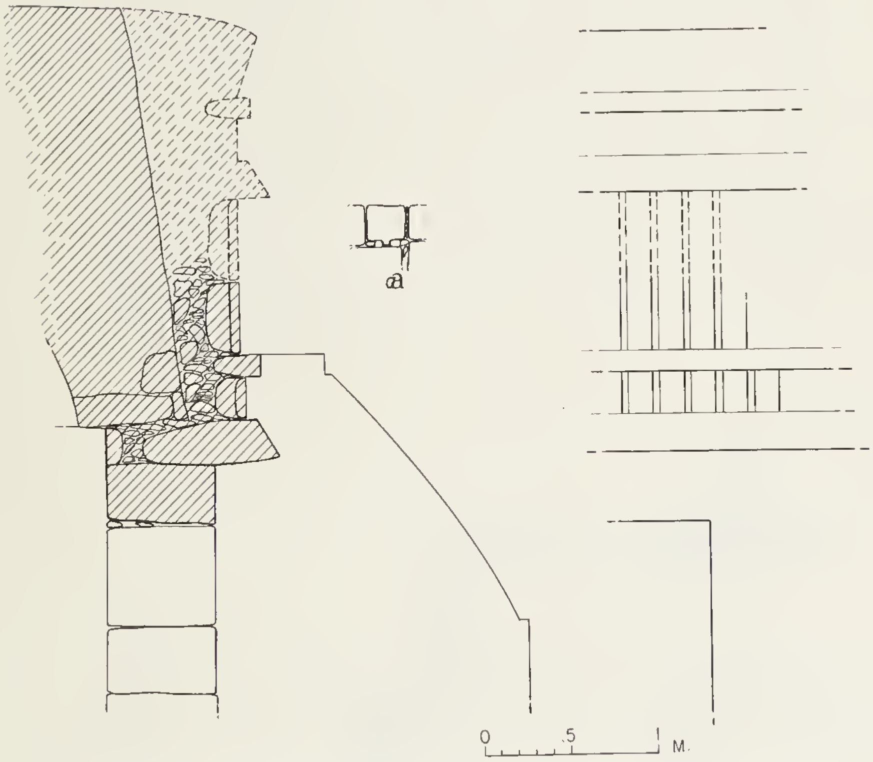


Figure 796. Ichmac, Building with Paintings. Detailed section and elevation of first-story facade at doorway to second room from south: a, detail of cordholder inside doorway.

shaped and fitted (fig. 797). About normal curve to soffit slopes (figs. 797a, 798). Had been large cross-beam at each end of room one course below spring of vault, and four small beams just below corbeled course under capstones (fig. 798). Three-member medial molding with middle member of colonnettes (fig. 796); cornice molding the same, probably with addition of usual outward-leaning coping course.

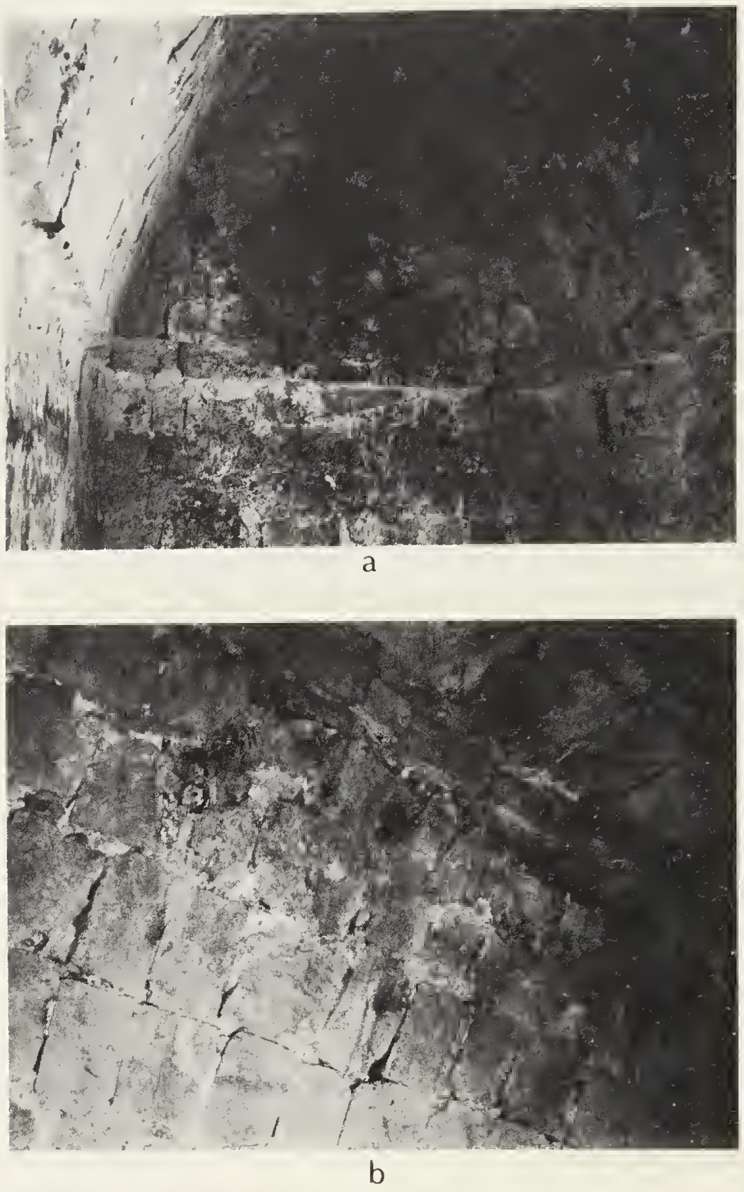


Figure 797. Ichmac, Building with Paintings. Views of second room from south of first story: a, north end of room; b, west side of vault near middle of room.

Decoration. Upper facade of lower story decorated with split columns (fig. 796). Two southern rooms of first story show remains of wall paintings. Only traces preserved in south room, considerably better preservation in second room from south. All wall and vault surfaces, including capstones, had been painted. Two horizontal panels on walls and two on soffits of vault seem once to have carried rows of elaborately dressed human figures (fig. 798). In the panels on the walls there also had been columns of glyphs. Decorative borders, of which some of the design could be made out, frame the panels. The color scheme of the borders is given in figure 798. The hieroglyphs, which were too fragmentary to copy, were painted in black. The human figures, also too fragmentary to merit copying, involved a number of colors, but they were not recorded. Photographs of the painting unfortunately show almost nothing (fig. 797).

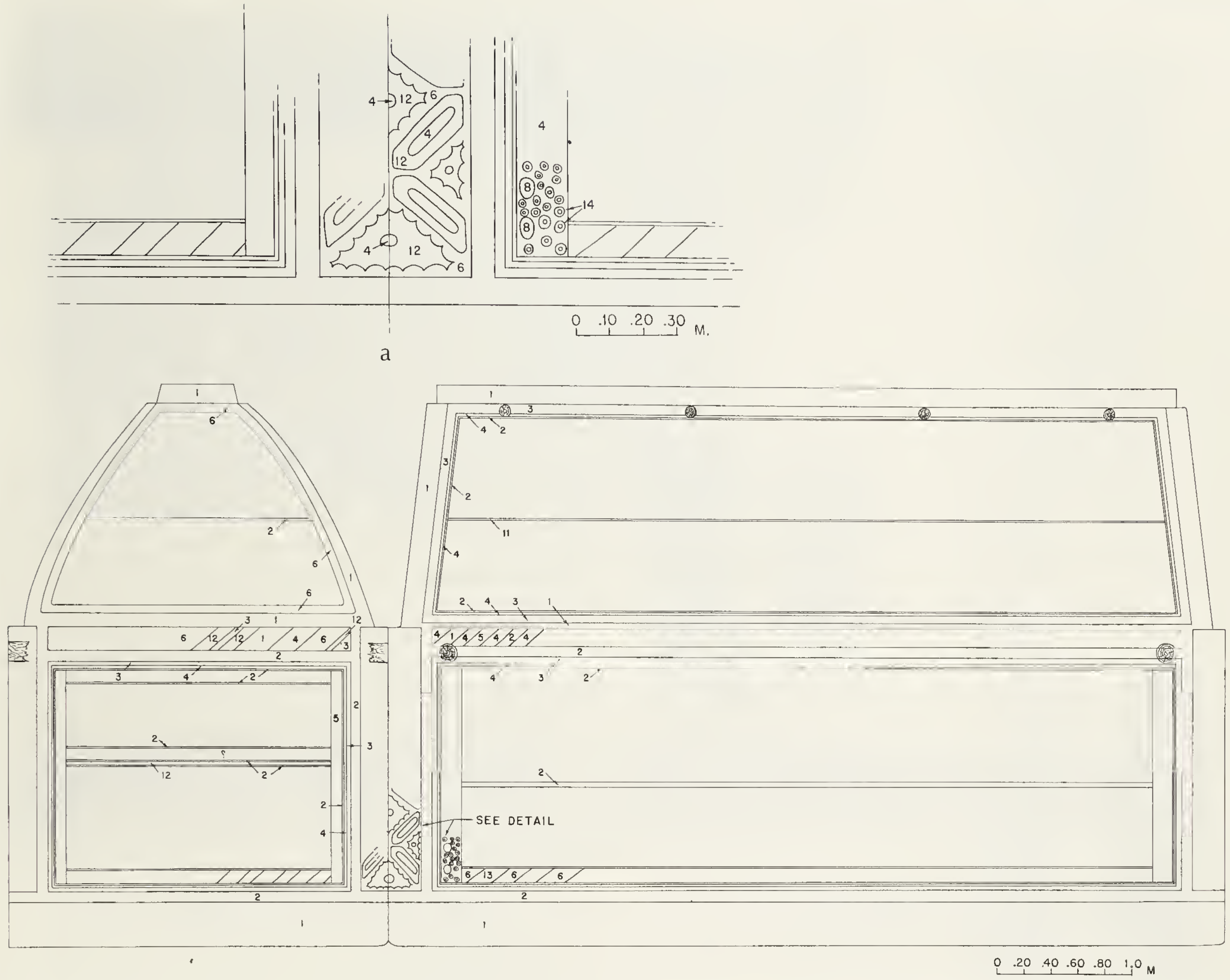


Figure 798. Ichmac, Building with Paintings. First story, second room from south. Diagram showing arrangement of paintings on walls of room. Each panel carried row of human figures: a, detail of border at corner of room. Key to colors: 1, orange red; 2, purple (dark reddish); 3, dark green; 4, yellow; 5, green; 6, blue; 7, black; 8, orange; 9, brown; 10, dark brown; 11, grey (battleship); 12, natural plaster (buff); 13, yellow background with purple design in center; 14, black rings.

WEST QUADRANGLE

About 100 m north of the West Group is a courtyard with structures on all sides that we have called the West Quadrangle. All of the buildings are fallen and deeply covered by debris except for a fragment of one room of the west range, and I have no notes on the orientation of the group. The quadrangle is primarily of interest in yielding a number of sculptured stones.

In a modern stone wall at the northwest corner of the quadrangle, we found fragments of two carved doorjambs and a carved lintel. The jambs, each of which is missing one or more pieces, very probably faced each other in the same doorway. The right-hand fragment is the upper part of the jamb (fig. 799b; and see Proskouriakoff 1950, fig. 103c). The head and shoulders of a human figure wearing an elaborate headdress are carved on the face of the jamb and a design of diamonds—possibly representing a serpent—is on the front edge (fig. 799d). The stone measures .67 m high, .51 m wide, .23 m thick. The left-hand piece is the lower part of the jamb (fig. 799a; and ibid., fig. 103d). The carving on the face of the stone seems to show a human figure seated on a bench or throne, and the front edge carries the same design (fig. 799c) as is seen on the edge of the right-hand jamb (see Proskouriakoff 1950, pp. 168–169, for discussion and possible date of sculpture). Also found in the field wall was a lintel, 1.05 m long, .58 m wide, and .24 m thick, that was carved with hieroglyphs on the front edge (fig. 800).

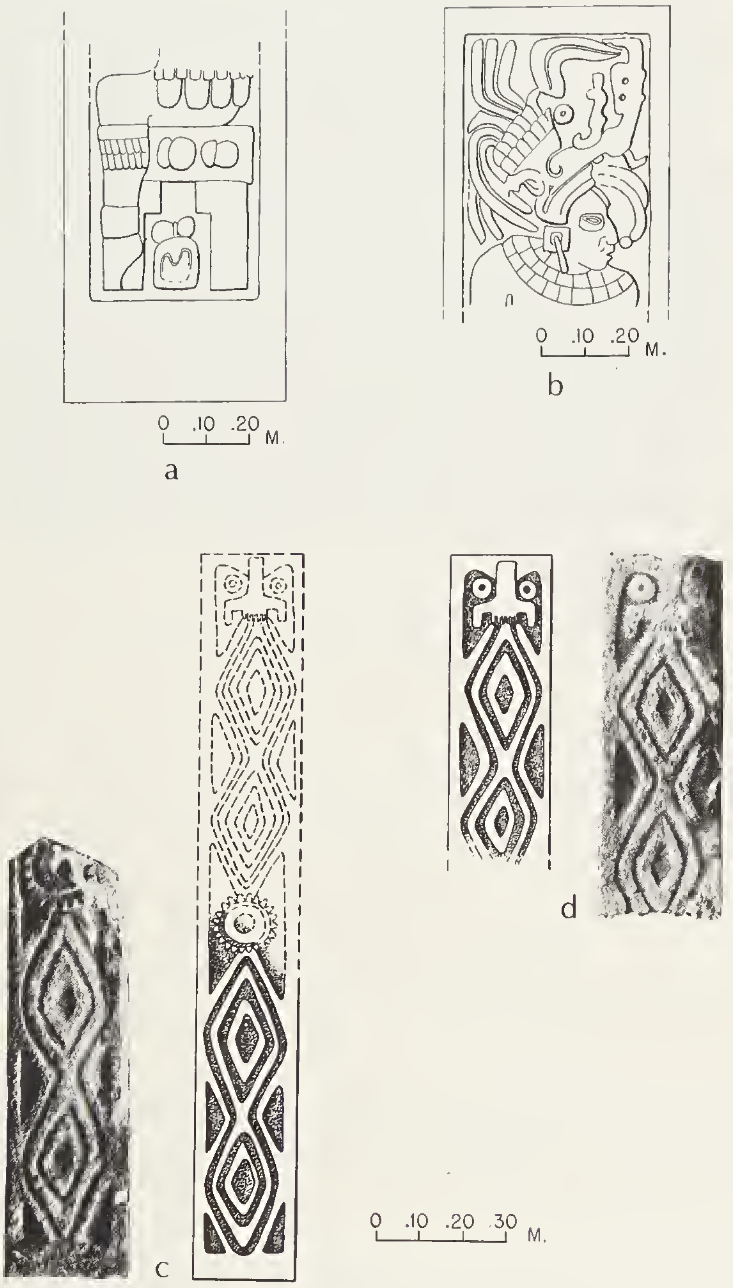


Figure 799. Ichmac, West Quadrangle. Sculptured doorjambs from field wall: a, lower part of left-hand jamb; b, upper part of right-hand jamb; c, front edge of left jamb (upper part restored); d, front edge of right jamb.

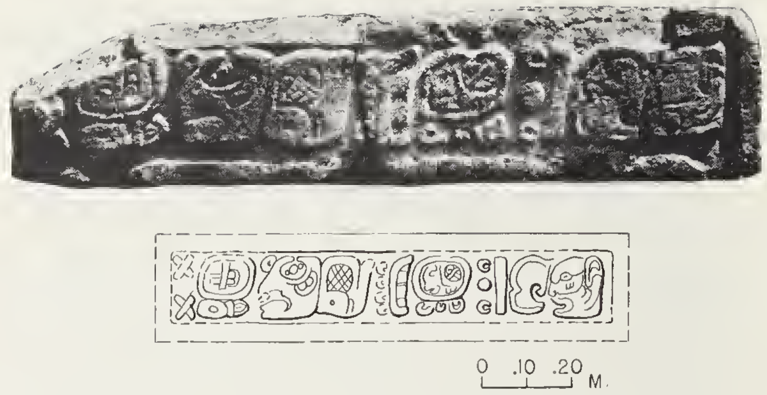


Figure 800. Ichmac, West Quadrangle. Sculptured lintel from field wall. Inscription on front edge.

West Range

Badly fallen building of which section of vault remains standing at north end (fig. 801a). Structure apparently consisted of at least three rooms in line on north-south axis and facing east on court of quadrangle. Probably one doorway to each room.

SUPERSTRUCTURE

Plan. See above. North room 2.46 m wide.

Construction. Front wall .60–.65 m thick, rear wall .65 m. Exterior facing of well-cut, faced, and fitted stone; interior facing of much poorer quality. No doorjambs visible, lintels of stone with glyphs on front (see Decoration, below). Vault with curved soffits, wide capstones, semispecialized vault stone (fig. 801). Medial molding a heavy string course with very slight bevel (.03 m) on face. Vertical upper facade of rough masonry (cf. Sayil, Str. 2C4, p. 112).

Decoration. Lintels with glyphic inscriptions on front edge found in debris in front of north and center doorways. North lintel (fig. 802a) measures 1.27 m long, .61 m wide, .23 m thick. Center lintel (fig. 802b) measures 1.44 m long, .60 m wide, .25 m thick. No lintel for south doorway found, but two stones that seem to have come from glyphic band were in debris near doorway. Stone No. 1 (fig. 802c) is .62 m long, .29 m high, .53 m deep. Stone No. 2 (fig. 802d) is .64 m long, .30 m high, .56 m deep. No other decoration from this building was found.

South Range

Collapsed vaulted structure that is now only a mound. Building presumably faced north to court of quadrangle. What apparently was central doorway shows sculptured jamb stones still in position but buried to their tops by debris. They were not dug out by us.

In the debris before the central doorway were two stones, possibly corbels that once rested on doorjambs and supported a lintel, carved with glyphs on one face (fig. 803a, b). Both measured .42 m wide, .21 m high, .39 m deep. Nearby lay another stone carved on one face with hieroglyphs (fig. 803c). It has a width of .45 m, maximum height of .32 m, and depth of .21 m.

MISCELLANEOUS NOTES

A doorway built of two sets of jamb stones side by side and two stone lintels was seen in a fallen building. A niche was noted at the end of a room that apparently had its opening above the level of the spring of the vault but extended downward to, or near to, floor level. No elements of facade masks were observed at Ichmac.

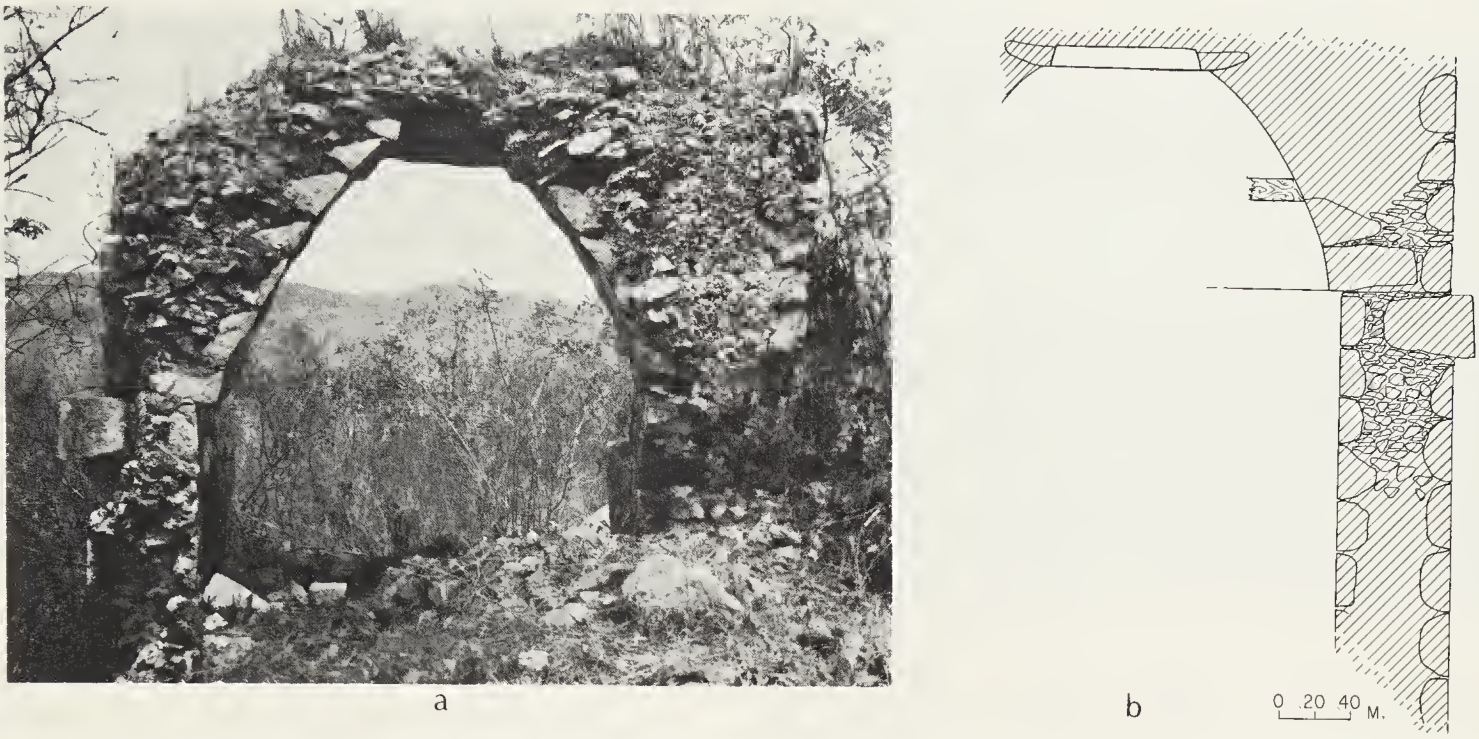


Figure 801. Ichmac, West Quadrangle, West Range: a, standing section of vault, looking north; b, section of west side of vault.

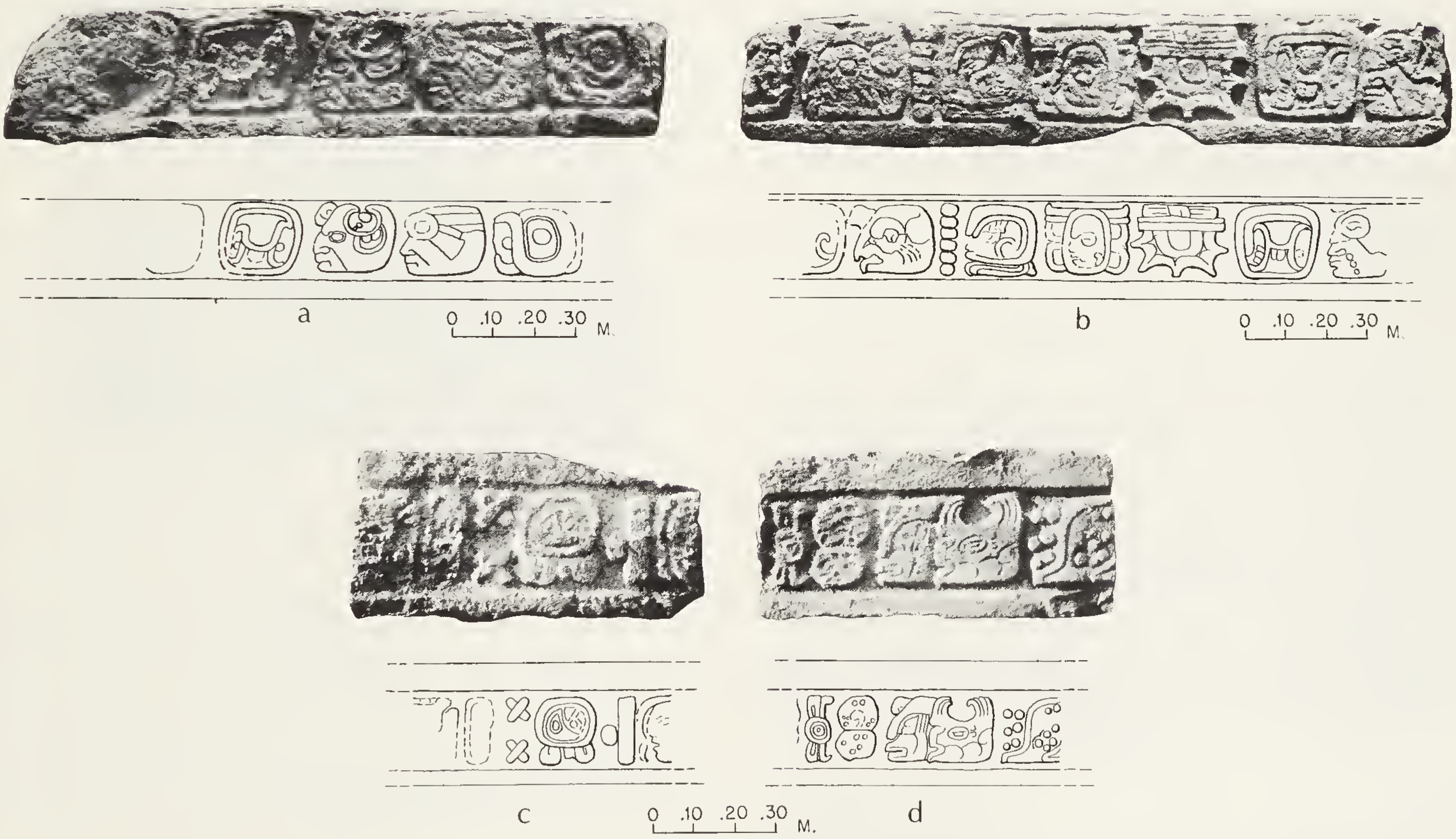


Figure 802. Ichmac, West Quadrangle, West Range. Lintels and carved stones: a, front edge of north lintel; b, front edge of center lintel; c, stone no. 1 from glyphic band; d, stone no. 2 from glyphic band.

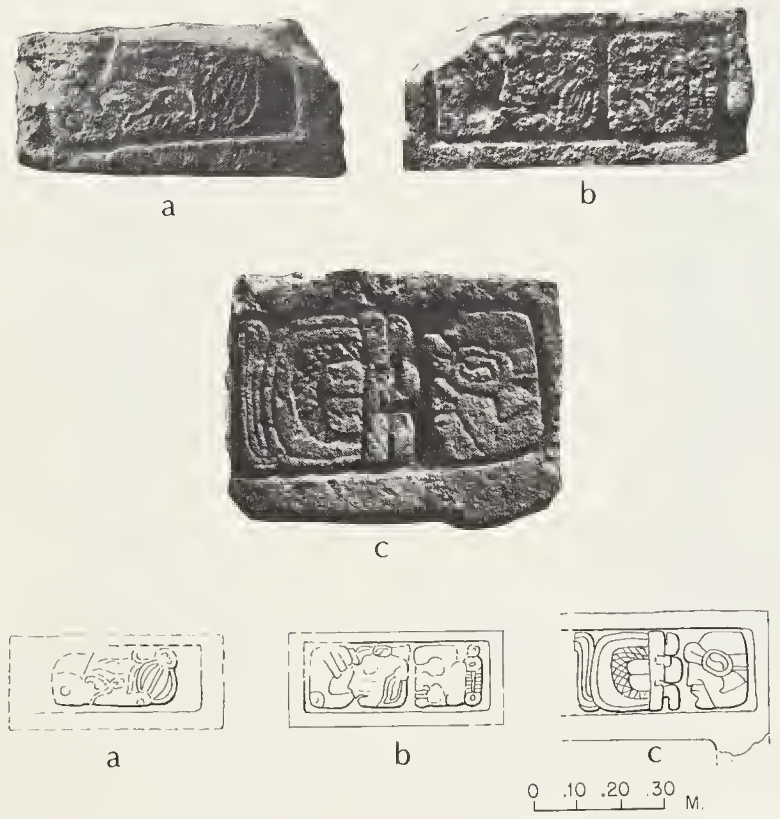


Figure 803. Ichmac, West Quadrangle, South Range. Fallen sculpture: a, b, corbels from doorway; c, carved stone.

Sisila

ETYMOLOGY

Unknown to me.

SITUATION

Approximately 9 km east-northeast of Cumpich, 5 km from Ichmac, and 8–9 km northwest of Xculoc.

TOPOGRAPHY

Site located in small savanna surrounded by hills. Construction in level areas and on hillsides.

WATER SUPPLY

No natural water source known today. Usual large number of chultuns. Modern wells at old hacienda of Chacnichen 2.5–3 km west and a little south of Sisila.

SIZE

Unknown. I believe Sisila to have been a fairly large site but our exploration was too cursory to be certain, and there seems to be relatively little architecture still standing.

CIVIC PLAN

Unknown. Groups of buildings seem to be scattered about with no apparent relation one to another. Courtyard arrangement is prominent and there is some compact grouping of adjacent courts.

Orientation. Only observations taken show one structure facing 14° south of east and another 15° west of south.

PALACE

Called El Palacio by the local inhabitants, this is a complex of buildings on two courts at different levels. The courts are formed by hillside terracing, and the whole assemblage of structures faces west, from which direction the principal approach presumably was. The western or lower court has a single range of rooms on the east. The eastern or upper court, which lies immediately behind the lower range and is approached by a stairway against the facade of that range, has buildings on the north, south, and east sides. The last, a two-story structure, is the principal building.

Sculptures M1 and M2 and Altar 1 were found in the western court (see Miscellaneous Sculpture and Monuments, below).

West Court

EAST RANGE

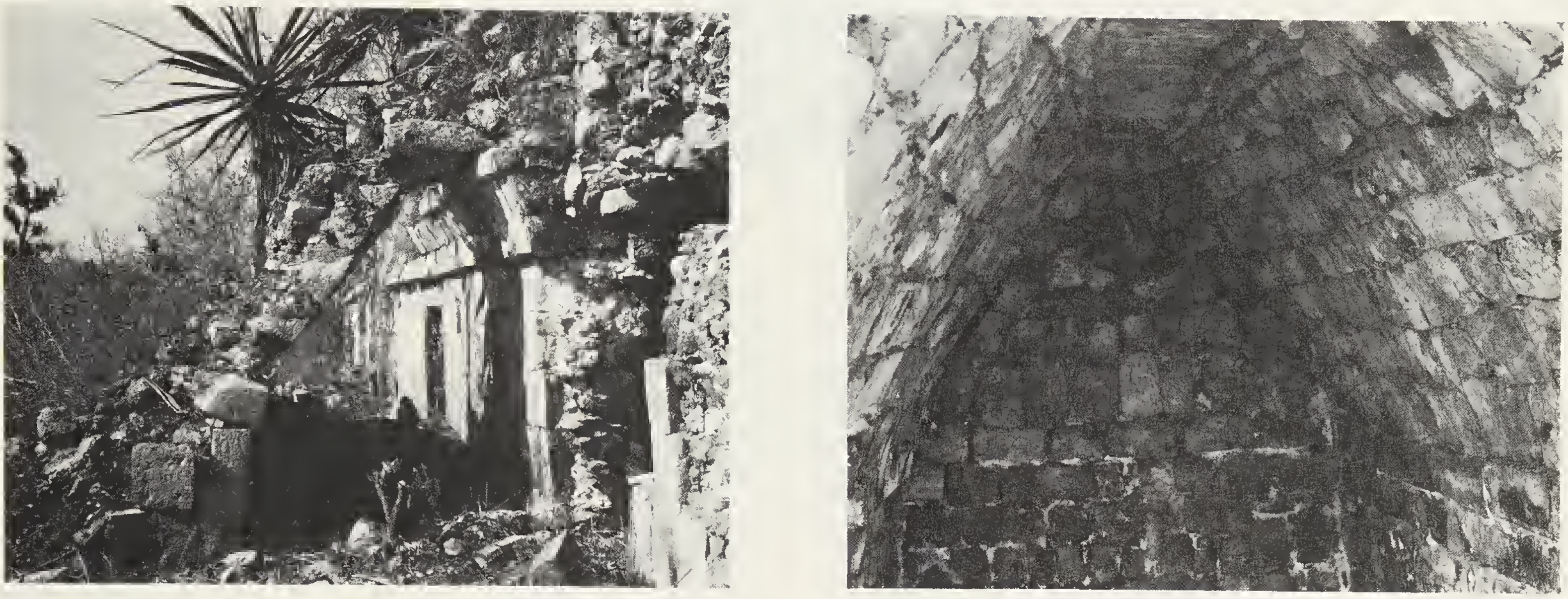
This single range of three or four rooms on a north-south axis faces west and backs against the terrace that forms the eastern or upper court.

SUPERSTRUCTURE

Construction. Off-center stairway, built against facade between doorways to south room and next room north, rises over vaulted passage (fig. 804a). Exterior wall facing of well-cut, dressed, and fitted stone (fig. 805a); interior facing less well cut and fitted (fig. 804b). Simple rectangular doorways with large stone lintels, well cut and dressed, but with unusual jamb construction in which one side of stone in outer wall facing is part of face of jamb (fig. 805). Jambs of doorways in secondary walls in north room (see below) of cornerstone and wall stone variety. Vaults built of only moderately well-faced and fitted semispecialized stone (fig. 804b). Slight curve to soffits. Offset at spring and corbels under capstones. Typical classic Puuc three-member medial molding of apron, rectangular string course, and reverse apron (fig. 806a). Only secondary constructions observed were transverse walls in north room (fig. 806b) dividing original room into three small chambers.

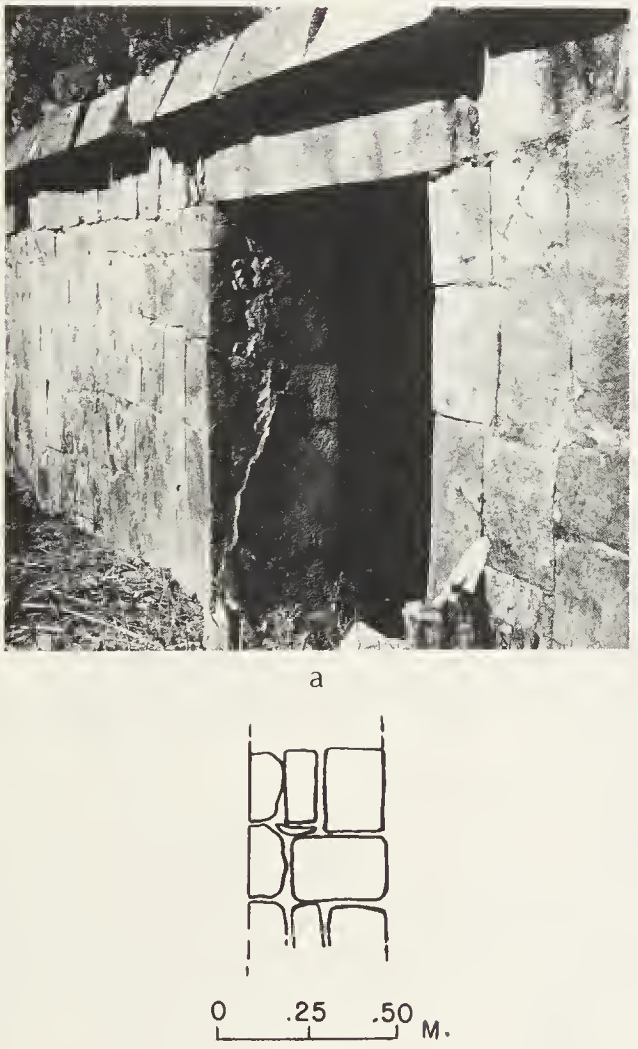
East Court

The structure on the north side of this higher court is fallen and shows no standing masonry. The southern building is mostly fallen, but enough remains to identify a doorway


a

b

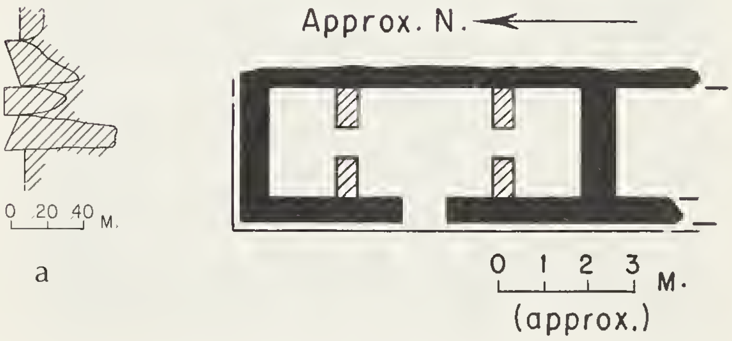
Figure 804. Sisila, Palace, West Court, East Range: a, passage under stairway, looking north; b, interior of south room, looking north.



a

b

Figure 805. Sisila, Palace, West Court, East Range. Doorway to second room from south: a, view from southwest, showing wall stone forming outer corners of jambs; b, sketch of masonry of jamb, employing wall stones at outer corner and cornerstones at inner corner.



a

b

Figure 806. Sisila, Palace, West Court, East Range: a, section through medial molding; b, sketch plan of north room.

with a single supporting column at its center, full-width well-cut jamb stones, and large well-cut and finished lintels. The eastern structure—a two-story building whose upper story is fallen—faces west on the court and overlooks the lower court. It appears to have been the most important building in the complex.

EAST BUILDING

SUPERSTRUCTURE

LOWER STORY

Plan. See figure 807.

Construction. Stairway to upper story probably secondary. Vaulted passage through staircase gave access to central room. Exterior wall facing of well-cut and fitted stone; interior facing rougher. Relatively wide doorways

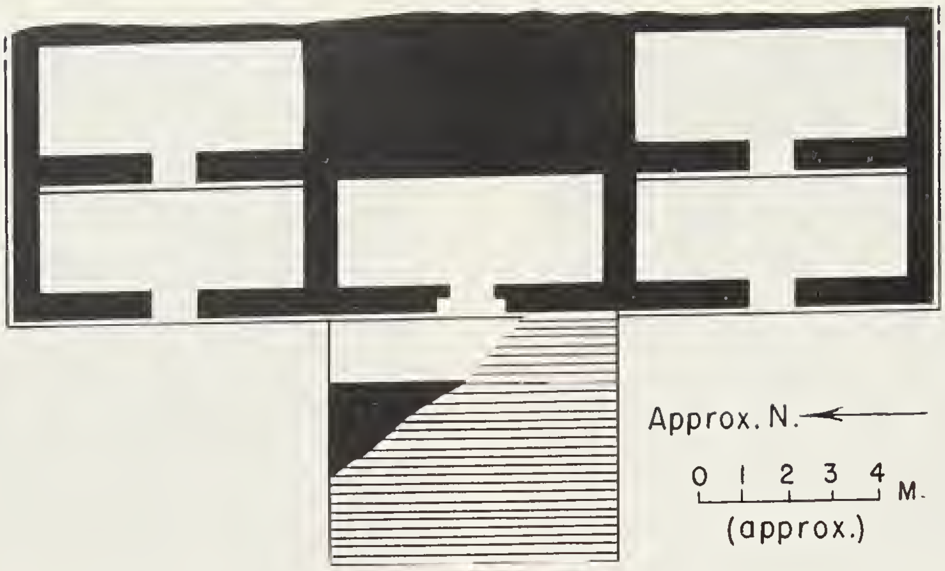


Figure 807. Sisila, Palace, East Court, East Building. Sketch plan of lower story.

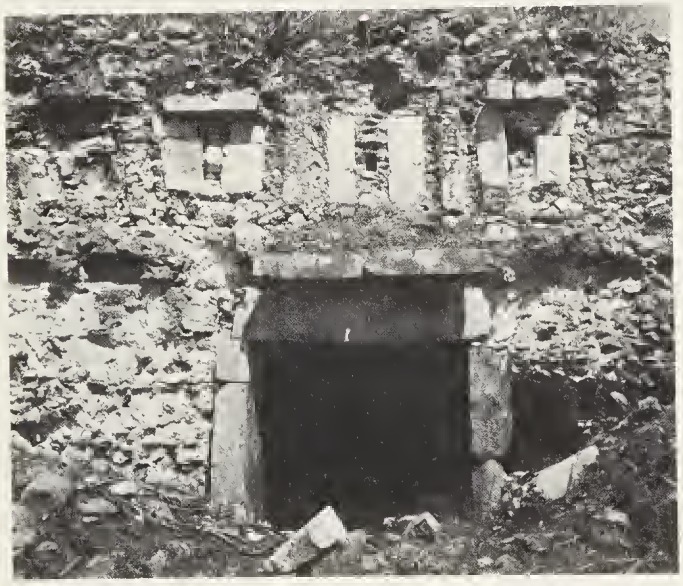


Figure 808. Sisila, Palace, East Court, East Building. Entrance to southern rooms of lower story, looking east.

with well-cut full-width jamb stones and large well-cut lintels (fig. 808). Jambs of doorway to center room are of pilaster form (fig. 807; and cf. Kabah, Str. 1A1, p. 142; Uxmal, House of Magician, Outer West Temple, p. 240). Wall projections in shape of human foot at each end of vault of southwest room. Lowest course of both medial and cornice molding is apron member (fig. 808). Upper courses of moldings fallen.

UPPER STORY. Almost totally fallen.

Construction. Three-member base molding of colonnettes between rectangular members (fig. 809a). Exterior wall facing of finely cut, dressed, and fitted stone. Twisted-rope design on lower wall surface (fig. 809a).

Decoration. Many fallen elements of facade masks and other facade decoration from lower and upper stories (fig. 809b). Mask elements probably from upper story but cannot be certain.

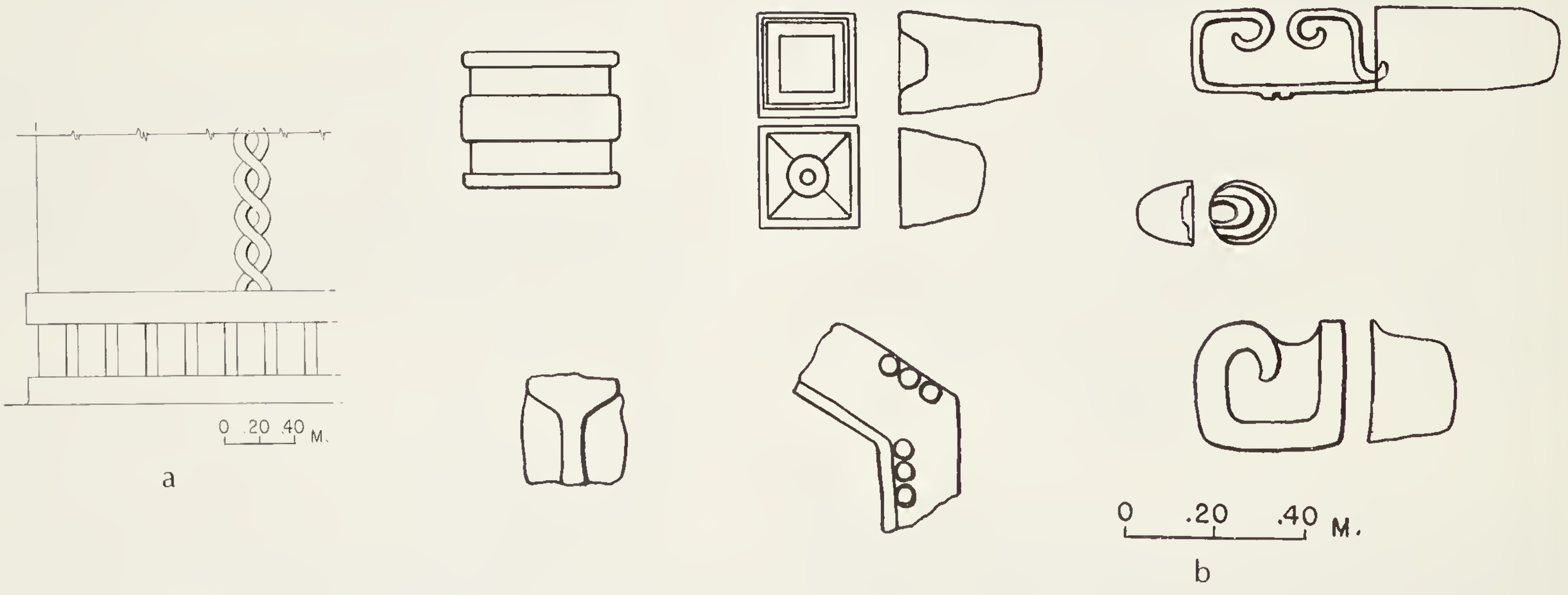


Figure 809. Sisila, Palace, East Court, East Building: a, elevation of base molding and lower part of wall at northwest corner of upper story; b, fallen elements of facade decoration from lower and upper stories.

Northwest Building

About 180 m northwest-by-west of the Palace is a partly standing structure with enough preserved to show the general scheme of decoration of the north end of the building. The structure seems to have faced approximately 14° south of east and in the general direction of the Palace.

SUPERSTRUCTURE

Elevation. See figure 810. Partly restored.

Construction. Simple rectangular base molding .40 m high made of single course of finely cut, faced, and fitted stone (fig. 810). Front wall about .60 m thick, rear wall .62 m. Exterior facing stone well cut, dressed, and fitted; interior facing less well finished and fitted. Vault offset on all sides of room at level of spring and corbeled courses under capstones. Curved soffit slopes. Span of vault (i.e., width of room) 2.90 m. Vault stone well faced and fitted but not specialized. Two-member medial molding with lower apron member and upper rectangular member (fig. 810). Apron member built of two courses, the upper course of tau-shaped stones (fig. 811a) that form series of square indentations in molding. Only two members of cornice molding standing, but almost surely was outward-leaning coping course for third member (fig. 810). Lowest member, an apron, made of two courses of stone, the upper course a row of colonnettes. Middle member a row of linked crescents or horseshoes (fig. 811c; and cf. Bobil, fig. 638b; Almuchil, Str. 6, fig. 696c), with rosette and tassel (fig. 811b) at center.

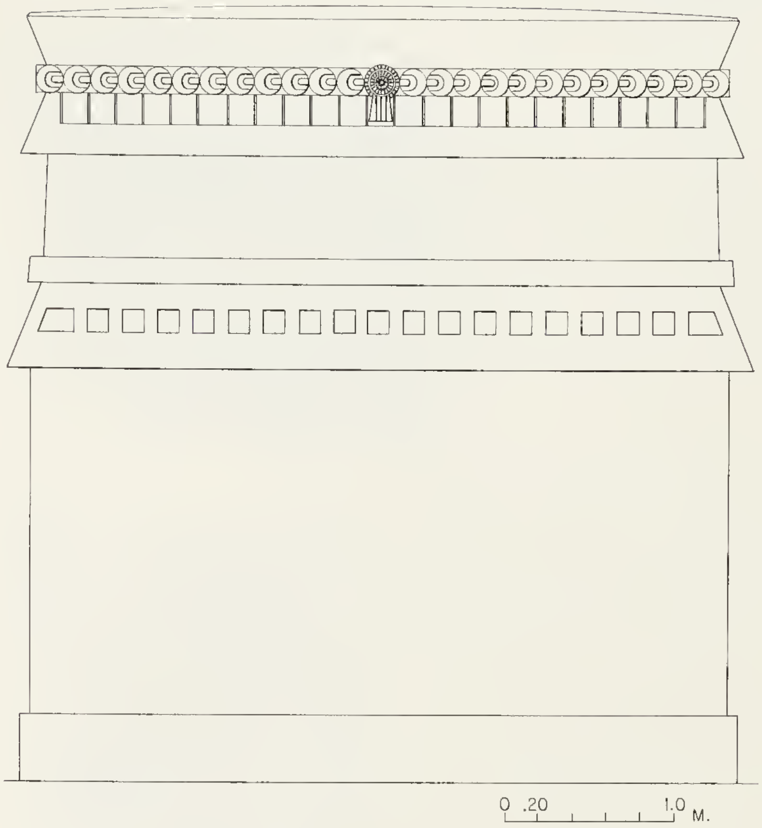


Figure 810. Sisila, Northwest Building. Restored elevation of north facade.

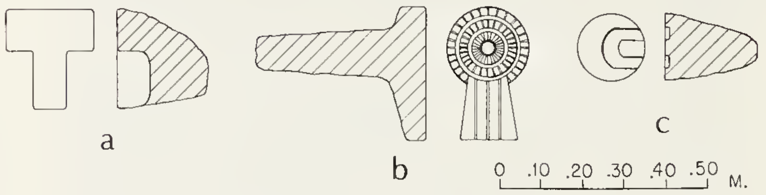


Figure 811. Sisila, Northwest Building. Decorative elements: a, tau-shaped stone from medial molding; b, rosette from cornice molding; c, crescent from cornice molding.

NORTHEAST GROUP

Somewhat over 200 m northeast-by-east of the Palace is a small courtyard group of buildings with a considerably fallen masonry structure on the north, and low rectangular platforms that presumably supported dwellings or appurtenant buildings on the other three sides. There are several chultuns in the court.

North Building

This badly fallen structure seems to have faced 15° west of south. The only standing masonry visible without excavation were a portion of the base molding and wall, and one doorway.

SUPERSTRUCTURE

Construction. Three-member base molding with rather large (.29 m diameter) colonnettes in middle member (fig. 812). Well-cut, faced, and fitted exterior wall stone; interior facing rather crudely cut with some chinking. Large well-cut and finished full-width jamb stones in average-width (.96 m) doorway.

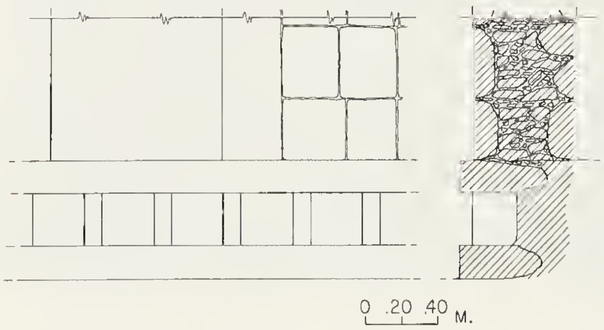


Figure 812. Sisila, Northeast Group, North Building. Elevation and section of base molding and lower wall at doorway.

GROUP OF BUILDING WITH GLYPHIC DOORWAY

Unfortunately my notes do not locate this group in relation to the Palace or to any other structure. It is a small closed courtyard with the principal building—from which the group takes its name—on the east side. On the north is a platform with a chultun in it and Sculpture M3 and Altar 2 resting on it. A small low platform near the center of the court carries Sculpture M4 (see Miscellaneous Sculpture and Monuments, below). There is no mention in my notes of the structures on the south and west sides of the court.

Building with Glyphic Doorway

This badly fallen, two-story building is located on the east side of the court and faces west toward the court. I think that the plan is the same as that of the East Building of the East Court of the Palace (see fig. 807), a possible difference being a rear center room. What little standing masonry was visible showed finely cut, faced, and fitted wall and vault stone, full-width jamb stones, and stone lintels. In the debris of the stairway to the second story was found a carved stone with a design almost identical to the serpentlike pattern on the edges of the sculptured doorjambs from the northwest corner of the West Quadrangle at Ichmac (see fig. 799c, d). The present stone, which measured .66 m long, .35 m wide, and .18 m deep, does not, however, seem to be part of a doorjamb.

The main interest of this building is the glyphic inscription on the doorway leading from the north front room to the room behind (fig. 813). The doorway, which is normal in all respects but the carving, may be compared to a similarly treated entrance in Structure 3B1 at Sayil (see fig. 236).

MISCELLANEOUS SCULPTURE

M1. Stone in shape of pottery jar but solid (fig. 814a). Height .71 m, maximum diameter .65 m, diameter at top .35 m, at bottom .25 m. Found in West Court of Palace.

M2. Fragment of badly weathered sculptured stone that may have been lintel. Bas-relief carving on one edge only. Maximum length .76 m, maximum height .25 m, maximum depth or width .55 m. Found in West Court of Palace.

Carving at lower left seems to show prone human figure with arms behind back (cf. fig. 655a), possibly with wrists tied (i.e., captive). Rest of sculpture too weathered to be certain of subject.

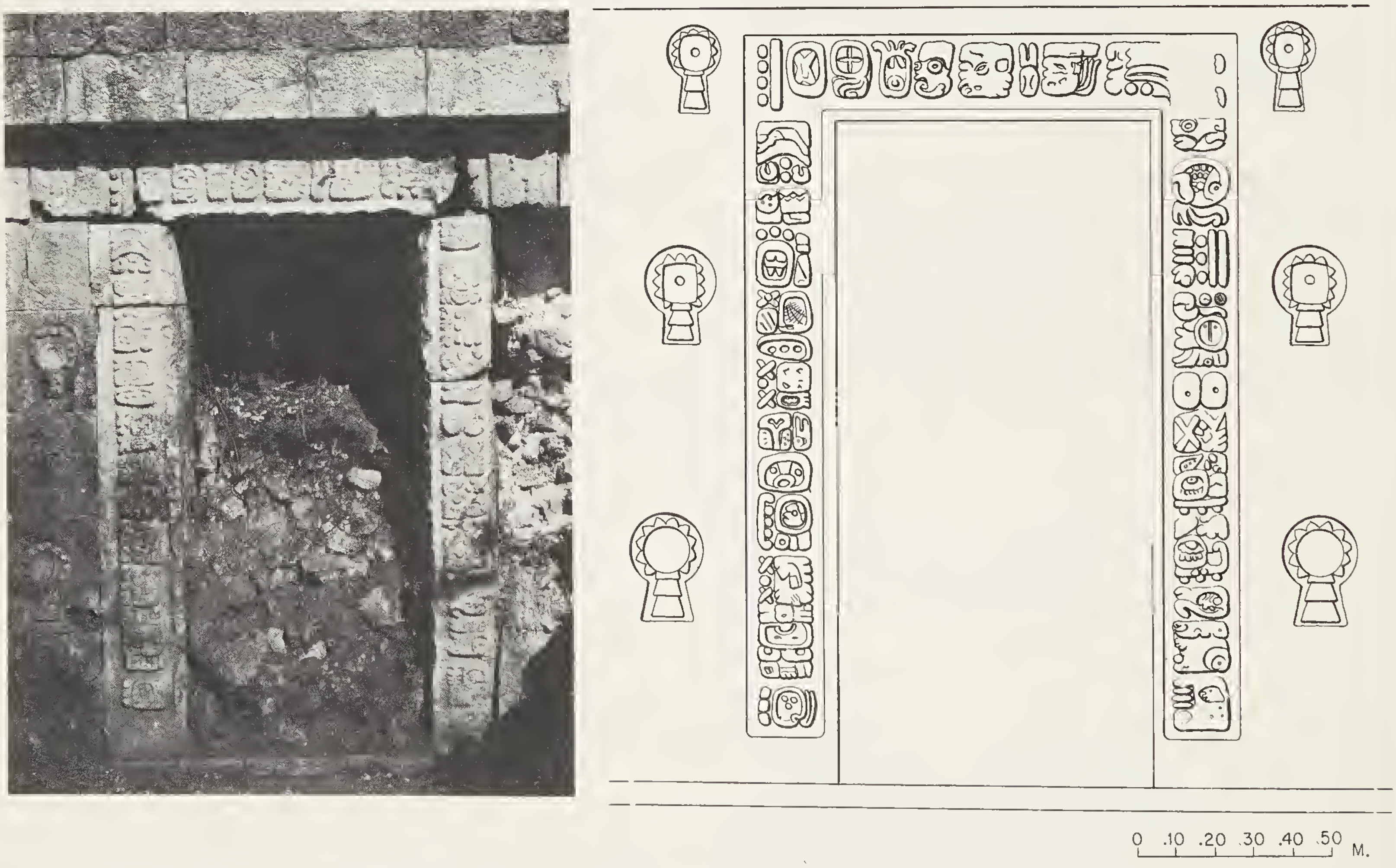


Figure 813. Sisila, Building with Glyphic Doorway. Hieroglyphic inscription and decoration around doorway to northeast room.

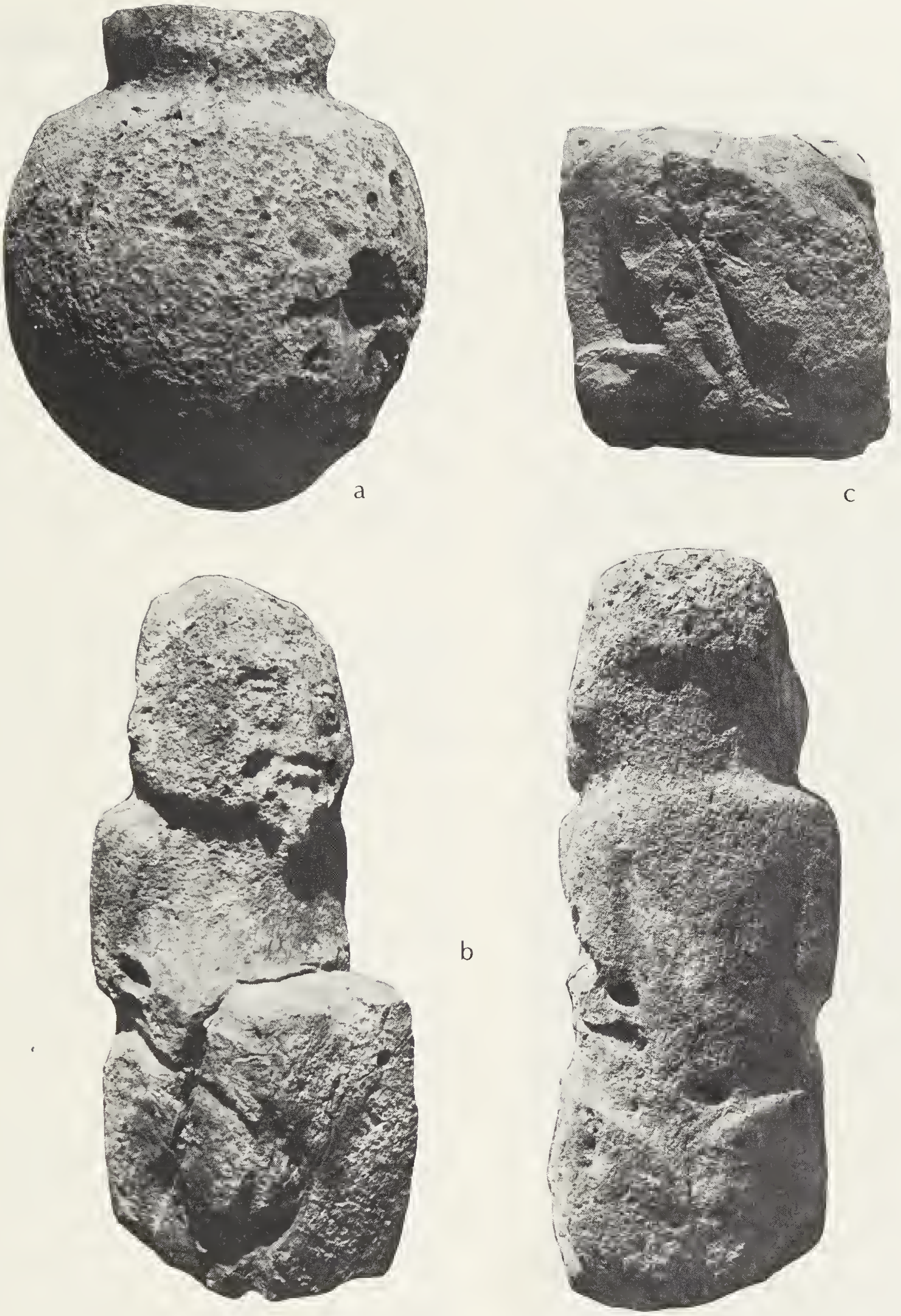


Figure 814. Sisila. Miscellaneous sculpture: a, M1, stone in shape of jar; b, M3, human figure of stone; c, M4, fragment of sculpture of human figure.

M3. Stone figure of human or deity in squatting position (fig. 814b). Height 1.40 m, width at shoulders and at buttocks .50 m, maximum depth .62 m. Found resting on platform on north side of court of Group of Building with Glyphic Doorway. Next to Altar 2 (see below).

Eyes of figure formed of frets or volute scrolls. What looks like small beard or goatee in photographs seems actually to be long tongue. Figure holds between hands and on knees a troughlike object that could have served to hold offerings.

M4. Fragment of bas-relief sculpture showing leg and buttocks of squatting (?) human figure (fig. 814c). Same kind of figure on opposite side of stone. Maximum height .50 m, maximum width .47 m, depth .45 m. Found on small platform near center of court of Group of Building with Glyphic Doorway.

MONUMENTS

ALTARS

Altar 1. Carved. About same size as Altar 2 (see below). Lying in West Court of Palace. Unfortunately, we failed to measure or photograph this monument. It is a large round monolithic altar with a plaited or mat design on four sides. In size, shape, and carving it is very similar to Altar 2.

Altar 2. Carved. Height .90 m; diameter at top 1.03 m, at bottom .95 m. Sides slightly curved from top to bottom with most of curve near bottom. Lying on platform on north side of court of Group of Building with Glyphic Doorway and next to Sculpture M3 (see above).

Broken and considerably weathered, large drum altar with four plait or mat designs in bas-relief (cf. fig. 551b), evenly spaced around sides. Area of design measures .68 m high by .15 m wide and begins .08 m from top of stone.

Xcucsuc

ETYMOLOGY

Roys (personal communication) writes: *cuc* or *cuuc* = squirrel; *suc* or *zuuc* = zacate or grass (and see Roys 1931, pp. 312, 330). Squirrel grass may be an unidentified plant. Variant spelling: Xcuksuc.

SITUATION

About 3 km west-northwest of Cumpich, 2 km west of Haltunchon, and 3 km or a little over east-southeast of Yakalmai.

TOPOGRAPHY

Ruins lie in, and on the edge of, a savanna. Buildings and groups of buildings located on natural limestone outcrops.

WATER SUPPLY

No permanent natural water source known at site (but see Cumpich cenote, p. 456). Many chultuns. Nearest modern water supply is from wells at Tzocchen and Cumpich.

SIZE

Medium-sized site of buildings and groups of buildings, none very large, that stretch over a distance of about 1 km. Many low platforms that presumably supported domestic structures.

CIVIC PLAN

Not apparent from our limited knowledge of the site. Isolated groups of buildings are scattered across the savanna, the courtyard arrangement of structures being the standard form within any group. A pyramid and good-sized platform of two terraces somewhere near the center of the ruins may prove to be significant in the planning of the site, once adequate mapping is performed.

Orientation. Observations on two buildings show that one faces 7°30′ south of east, the other 22°30′ west of south.

MAIN GROUP

The largest concentration of remains lies near the western or northwestern limits of the site. This group of badly fallen structures is marked by a number of buildings around a closed court at the extreme west, a pyramid about 150 m east-by-south or east-southeast of the court, and a good-sized terraced platform a few meters farther east. Parts of the east, south, and west buildings on the court are still standing, the one on the east being of particular interest in showing two periods of construction and two styles of masonry.

The earlier structure was a building of several rooms averaging 2.30 m in width, with walls .43 m thick of small, fairly well-cut, faced, and fitted stone, narrow doorways with jambs built of cornerstones, small thin stone lintels, small fairly well-faced and fitted unspecialized vault stone, and a relatively thin roof cap. Added to this structure on the west or court side was a building that employed larger well-cut, faced, and fitted wall stone, large full-width jamb stones, and large lintels, all well cut and dressed, a single well-cut column in one doorway, higher vaults than in the earlier structure built of semispecialized stone. The later building is quite typically classic Puuc.

A pyramid, now standing some 9–10 m high, lies about 150 m east and somewhat south of the building just described. No details of the badly fallen structure were available, other than that it had carried a building on its summit.

A short distance east of the pyramid is a platform 2–2.5 m high with a stairway on the west side. In front of the stairway is a small drum altar about .20 m high and .50 m in diameter, and a large stone that may have been a stela (see Monuments, below). Set back from the stairway about 15 m (i.e., east) is another platform or terrace some 2 m high with a stairway also facing west. A large column altar stands in a niche in the stairway on the level of the first step (fig. 815). At the northwest corner of the platform is a plain stela (see Monuments, below).

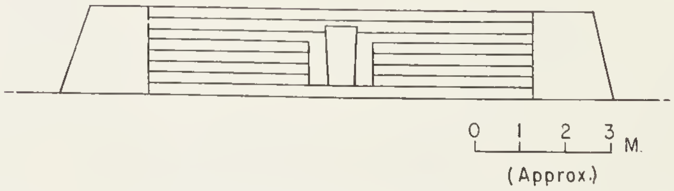


Figure 815. Xcucsuc, Main Group. Sketch elevation of stairway to platform in east part of group.

SOUTH GROUP

Located some 350 m south of the Main Group is a cluster of remains in which two courtyard assemblages contain moderately well-preserved buildings.

West Court

Best-preserved building is on west side of court (see below). One building on south side of court carries three-member base molding with colonnettes in middle member (fig. 816). Wall masonry is of finely cut, faced, and fitted stone (fig. 816b), and doorways were made with large well-cut and faced jamb stones, and large, finely cut stone lintels.

Small masonry platform at center of court. Plain column altar .52 m high and .38 m in diameter resting on platform.

WEST BUILDING

Structure consists of two parallel central rooms with north-south axes, and secondary rooms of undetermined number and arrangement at north and south of central rooms. Only eastern central room, which faces east on courtyard, is standing.

SUPERSTRUCTURE

Plan. See figure 817a.

Section. See figure 817b.

Walls. Front wall .60 m thick at doorjamb. Interior facing of moderately well-cut, faced, and fitted stone (fig. 818). Exterior facing slightly better worked and fitted.

Doorway. Only .71 m wide. Jambs built of cornerstones with single vertical course of wall stone between. Stone lintel.

Wall Openings, Depressions, and Projections. Two small rectangular windows or ventilators in front wall of east center room and one such opening in north wall.

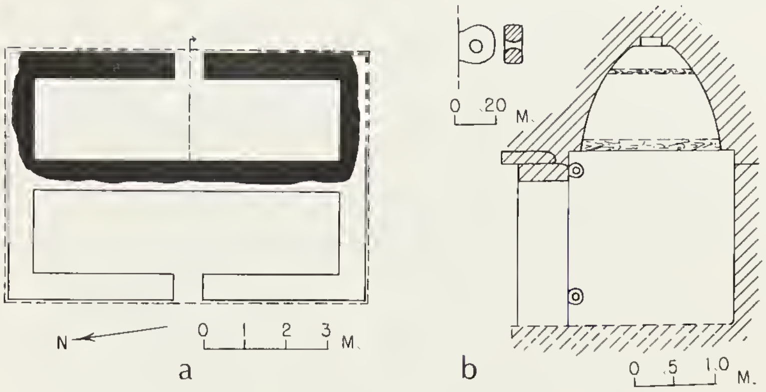


Figure 817. Xcucsuc, South Group, West Court, West Building: a, plan; b, transverse section through east room; detail of cord-holder at left.

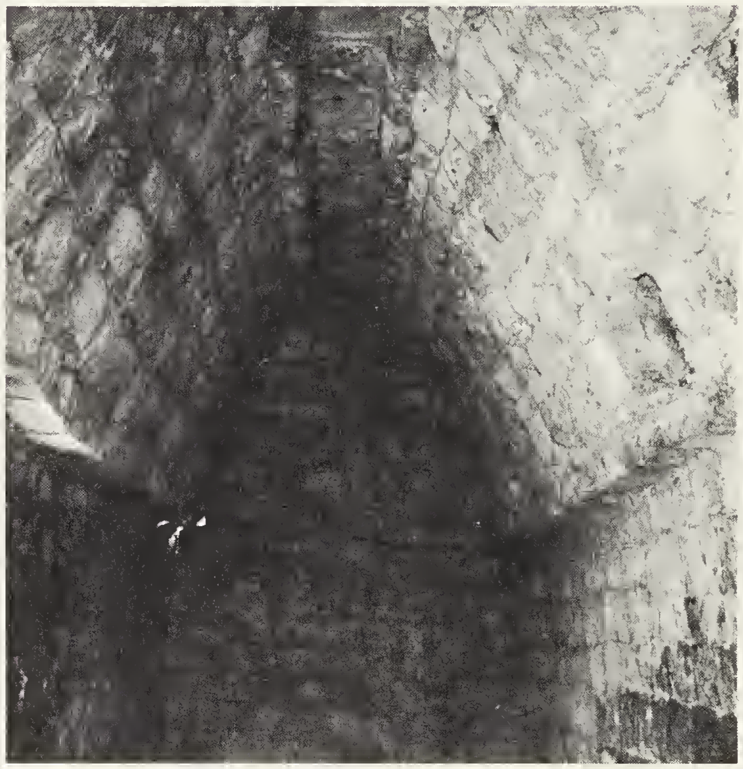


Figure 818. Xcucsuc, South Group, West Court, West Building. View of east room, looking south.

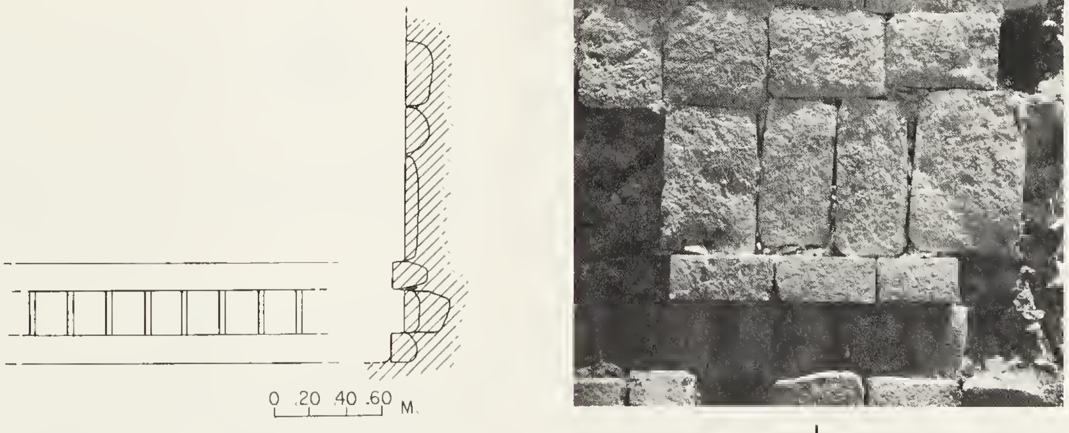


Figure 816. Xcucsuc, South Group, West Court, South Building: a, detail of base molding and wall masonry; b, view of same.

Two tongue-type cordholders and two projecting ring-type cordholders (fig. 817b, detail) .69 m from jamb at each side of doorway.

Vaults and Beams. Barrel-shaped vault heavily offset at spring (fig. 817b) and with ends of vault slightly curved and sloped forward. Rather crudely cut and finished block-like vault stone with much chinking between stones (fig. 818).

Small beam sockets, each pair 2 m from end of vault, at three-quarters height of vault. Larger beam sockets, each pair .32 m from end of vault, in spring course (fig. 817b).

Moldings. Only lowest course, a rectangular member, of medial molding in place (fig. 817b), and no cornice molding remaining.

Decoration. Stones carved in shape of fork with five tines (fig. 819) found on roof of building and in debris behind (west) building. Seem to have formed roof decoration, most probably roof crests, or *adornos,* of sort—though of different design—found frequently at Chichen Itza (e.g., see Morris, Charlot, and Morris 1931, vol. 1, figs. 22, 46; Ruppert 1931, pl. 8a; 1935, fig. 245; 1943, figs. 4a, b, 10a, 17d) and occasionally elsewhere (e.g., see Sanders 1955, figs. 8b, 10a; and see Xcocha, Southeast Group, p. 513, below) but on the whole relatively rare in Maya architecture.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Remains of badly fallen rooms at north and south ends of building that seem to have been secondary to central rooms. No standing masonry or other architectural detail visible.

East Court

About 25 m east of the just-described West Court is another enclosed courtyard. The building on the north side is in fair state of preservation. At the center of the court is a small rectangular platform on which rests a round monolithic altar.

NORTH BUILDING

Two parallel rooms with east-west axes, of which the southern room, which faces south on court, is largely intact. Portion of facade preserved over southern doorway (fig. 821a).

SUPERSTRUCTURE

Plan. See figure 820a.

Section. See figure 820b.

Walls. Front wall .52 m thick at doorjamb; end walls .68 m thick; medial wall about .75 m thick, probably owing to superimposed roof comb. Exterior wall masonry of well-cut, faced, and fitted stone (fig. 821a), interior masonry of stone slightly less well worked (fig. 821b).

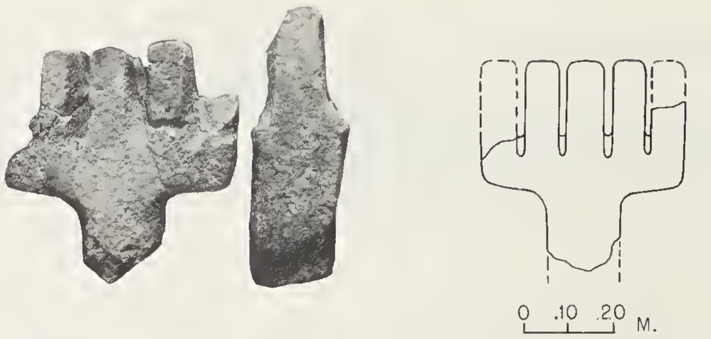


Figure 819. Xcucsuc, South Group, West Court, West Building. Carved stone, probably roof crest, from roof of building.

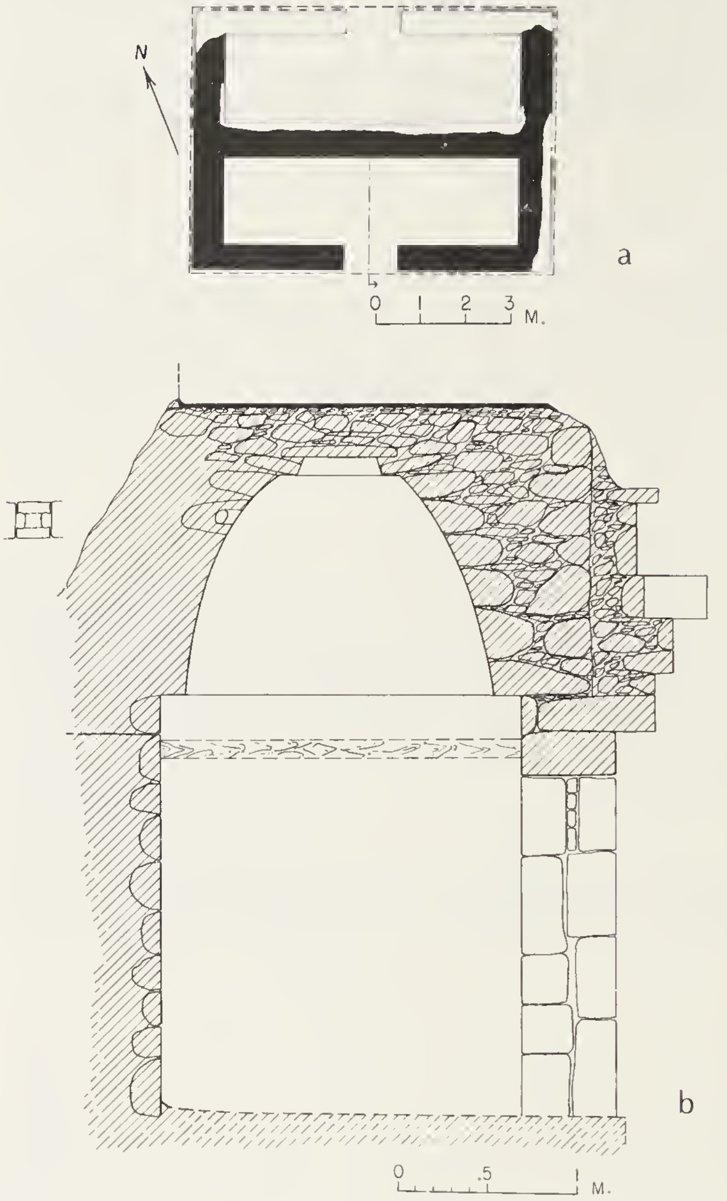


Figure 820. Xcucsuc, South Group, East Court, North Building: a, plan; b, transverse section through south room; detail of cordholder at left.

Doorway. Jambs built of cornerstones (figs. 820b, 821a). Well-cut and finished stone lintel.

Wall Depressions and Projections. Three-tongue type of cordholders on inner wall at each side of south doorway and one above center of lintel. Large cordholder of dumb-sheave variety on north soffit of vault (fig. 820b, detail).

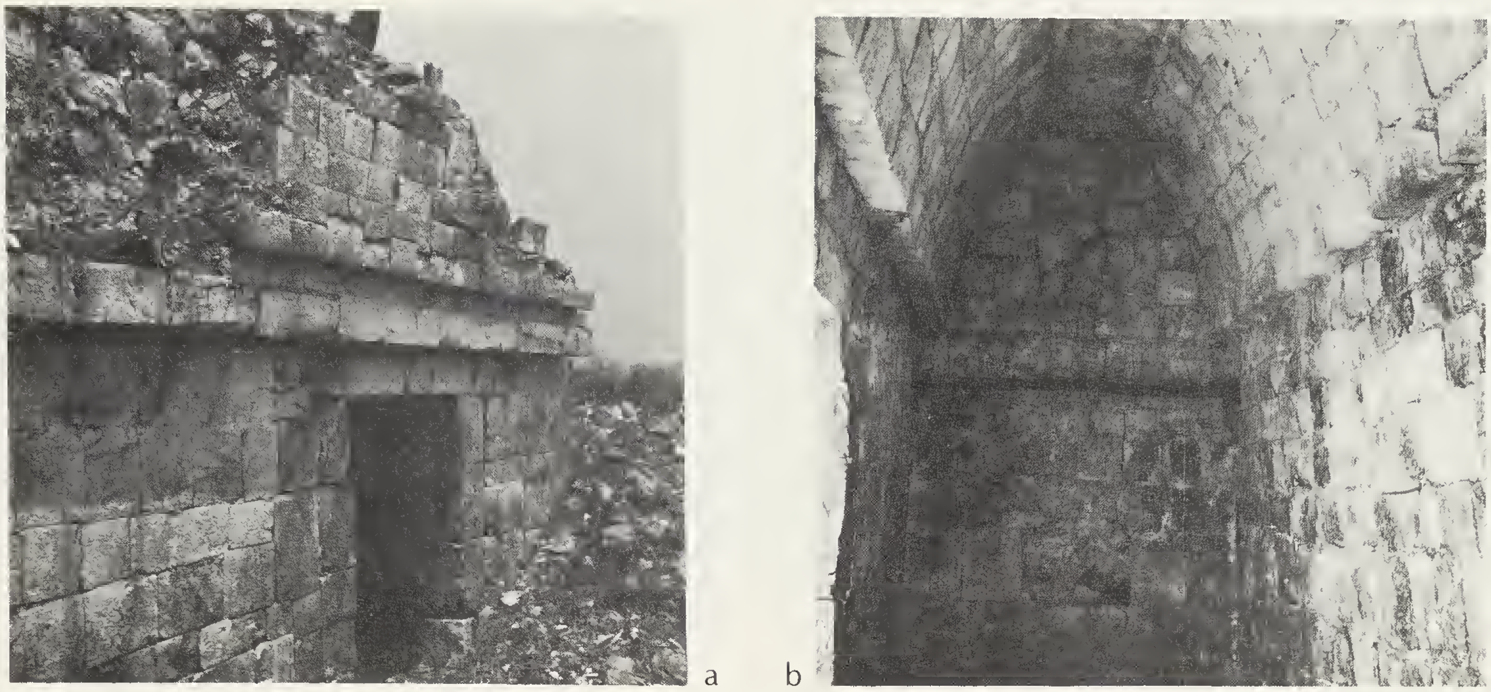


Figure 821. Xcucsuc, South Group, East Court, North Building: a, view of south doorway and remains of upper facade, looking east; b, interior of south room, looking west.

Small crude ring-type cordholder also on north soffit in south room. Well-cut rectangular stone, .24 m high and .34 m wide, tenoned into facade above medial molding over south doorway (figs. 820b, 821a).

Vaults and Beams. Heavy overhang at spring of vault and of corbels under capstones (fig. 820b). Well-faced and fitted blocklike vault stone (fig. 821b).

Beam sockets .20 m from each end wall in second course below spring (fig. 820b).

Moldings. Medial molding of three rectangular members, the lowest and middle members made of two courses each (figs. 820b, 821a).

Only two stones of lowest course of cornice molding in place. Molding probably like middle and upper members of medial molding, but with coping course somewhat higher than top member of medial molding.

Roof. Fair amount of plaster surface of roof preserved. Roof .30 m thick from underside capstone to upper surface (fig. 820b).

Roof Structure. Trace of southern footing of roof comb preserved (fig. 820b). Structure apparently rested more or less directly over medial wall of building.

Decoration. Large stone tenon over south doorway (figs. 820b, 821a) presumably supported stone or stucco figure now gone.

EAST GROUP

Two clusters of fallen buildings—probably once courtyard arrangements—lie about 1 km east of Main Group. Small amount of exposed masonry showed well-cut, faced, and fitted wall stone.

MISCELLANEOUS NOTES

Low circular platform about 10 m in diameter and .50–.60 m high on floor of savanna between pyramid and terraced platform in Main Group (see p. 486, above). Single course of large unworked stones forms edge of platform, and low steps are seen at several places outside perimeter of large stones. Upper surface of platform fairly level, made of small stone, and may represent disintegrated plaster floor.

Fallen building about 10 m northwest of West Building in West Court of South Group shows base molding and wall masonry like that of building on south side of court (see p. 487 and fig. 816).

No elements of facade masks were seen at Xcucsuc.

MONUMENTS

STELAE

Stela 1. Plain. Approximately 2 m high. Standing at northwest corner of upper terrace of platform east of pyramid in Main Group (see p. 486, above). Fairly well cut on all sides. Some weathering.

Stela (?). Not known if carved or plain. Fallen forward from standing position behind altar in front of stairway to lower terrace of platform, east of pyramid in Main Group (see p. 486, above). Large dressed stone with face too deeply buried in debris to determine if it was carved or not.

ALTARS

Altars. Large number of typical monolithic altars, only one of which was recorded (see p. 486), were seen throughout the site.

Yakalmai

ETYMOLOGY

Roys (personal communication, and see Roys 1935, pp. 7–8) translates this name *akal* or *yakal*, pond or wet place, *mai* or *may*, family name; *yakalmay*, the pond of the May family. Variant spelling: Yakalmay, Akalmai, Akalmay.

SITUATION

Approximately 7 km west-northwest or northwest-by-west of Cumpich, 3–4 km in the same direction from Xcucsuc, 3 km east of Xcorralche, and 7 km southeast-by-east of the town of Pocboc.

TOPOGRAPHY

Ruins located on hilltops, on hillsides, and on low rock outcrops on floor of savanna of Yakalmai, from which the site takes its name.

WATER SUPPLY

In spite of name of ruins (see Etymology, above), no natural water source known at site. Numerous chultuns observed. Nearest modern water supply at Tzocchen, about 5 km to the east, and at Pocboc (see above). Judging from the name, it is very probable that Bacabchen, well of the Bacab (see Roys 1957, p. 24), some 7 km north-northwest of Yakalmai, is the site of a natural source of water, presumably a cenote.

SIZE

Not known. Remains of buildings were observed over a distance of about 1 km in a north-south direction, and site may be fairly large.

CIVIC PLAN

Not known. Only North Group was closely examined. Arrangement of site possibly like Xcalumkin (see p. 419) but no obvious central concentration of building was observed.

Orientation. Observation possible on only one building which faced 27°30′ south of east.

NORTH GROUP

This is the northernmost group of buildings that we saw at Yakalmai. The ruins are located on a relatively high hill that falls off steeply to the surrounding savanna on the north, east, and west, but slopes more gradually to the south where a projecting spur descends to level ground. The group—which consists of buildings on the north, west, and south sides of a court (fig. 822), the northern structure being completely fallen—seems to face east but is quite obviously approached from the south where a series of three or four terraces, some with building remains, lead up to the courtyard. So formal an approach to a hilltop group is rarely found.

Several chultuns were seen in the ascending terraces and in the uppermost courtyard. A rectangular pillar with a three-member molding, possibly from a doorway, possibly an altar (cf. Cacabxnuc, South Group, fig. 773b; Xcalumkin, Altar 2, fig. 763a), was observed on one terrace.

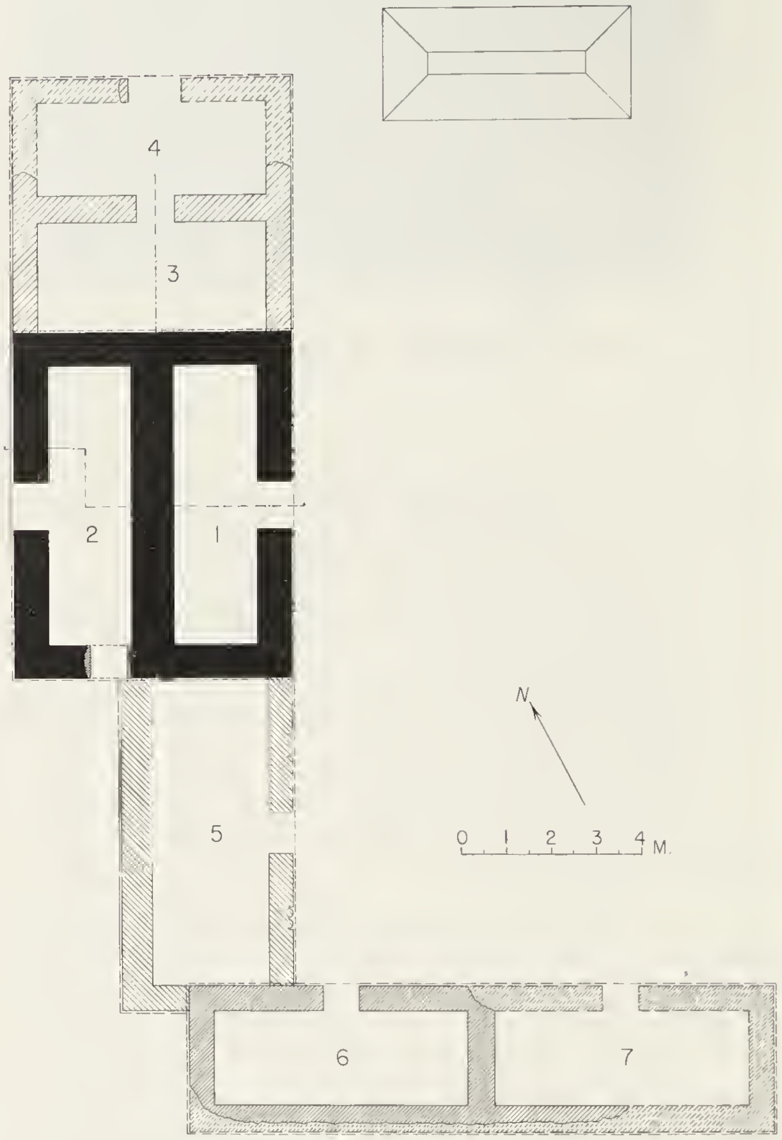


Figure 822. Yakalmai. Plan of North Group.

West Building

Facing east toward the open side of the court, this is the principal building of the group (fig. 822). The structure, which is in better than average state of preservation (fig. 823), originally consisted of only two rooms, to which were added other rooms at the north and south, the southern addition joining a previously separate two-room structure that then became a south wing of the West Building. The original building (Rooms 1, 2) is relatively well pre-

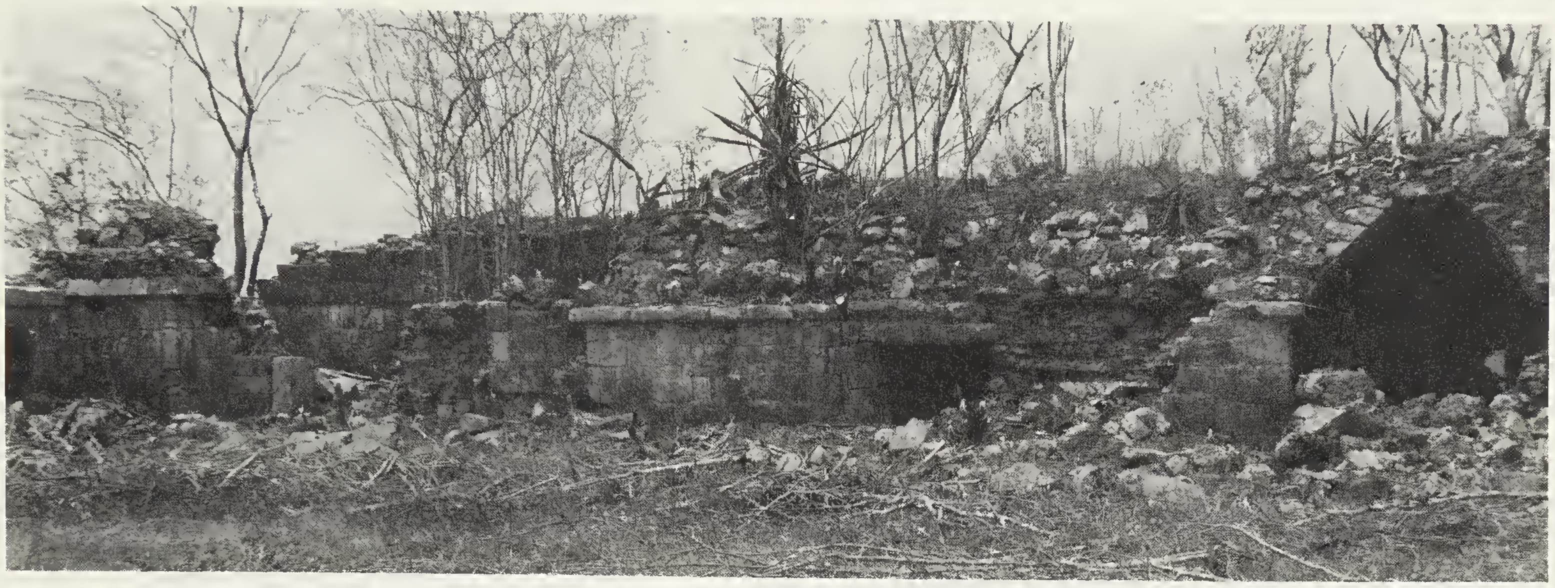


Figure 823. Yakalmai, North Group, West Building. View from east, showing vault of Room 3 in section.

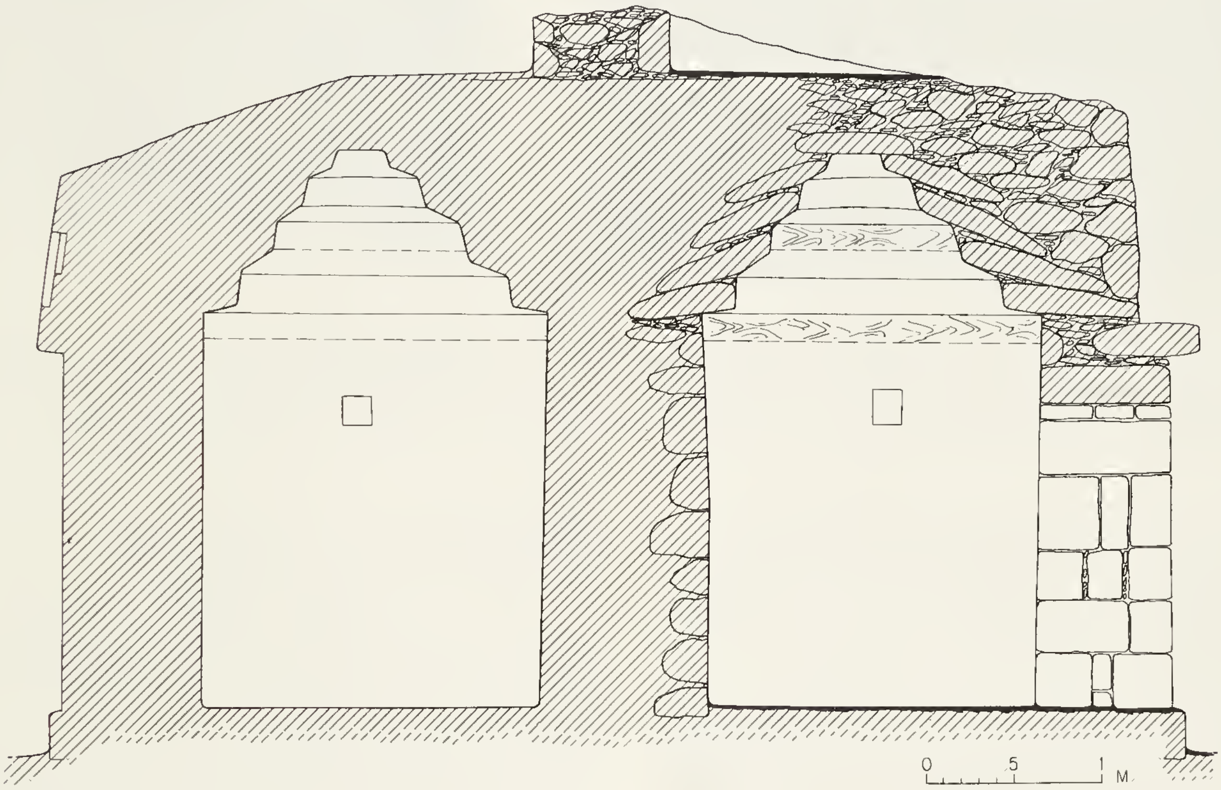


Figure 824. Yakalmai, North Group, West Building. Section through Rooms 1 and 2.

served, only the upper facades and the roof comb having fallen. The north addition (Rooms 3, 4) is partly standing, the southern vault largely intact, the northern completely fallen. The south addition (Room 5) has most of the lower walls standing and parts of the vault, but the facade above the medial molding has gone. The south wing (Rooms 6, 7) is mostly fallen, with only a small amount of wall and one doorway remaining, and nothing left of the vault.

SUPERSTRUCTURE

ORIGINAL BUILDING (Rooms 1, 2)

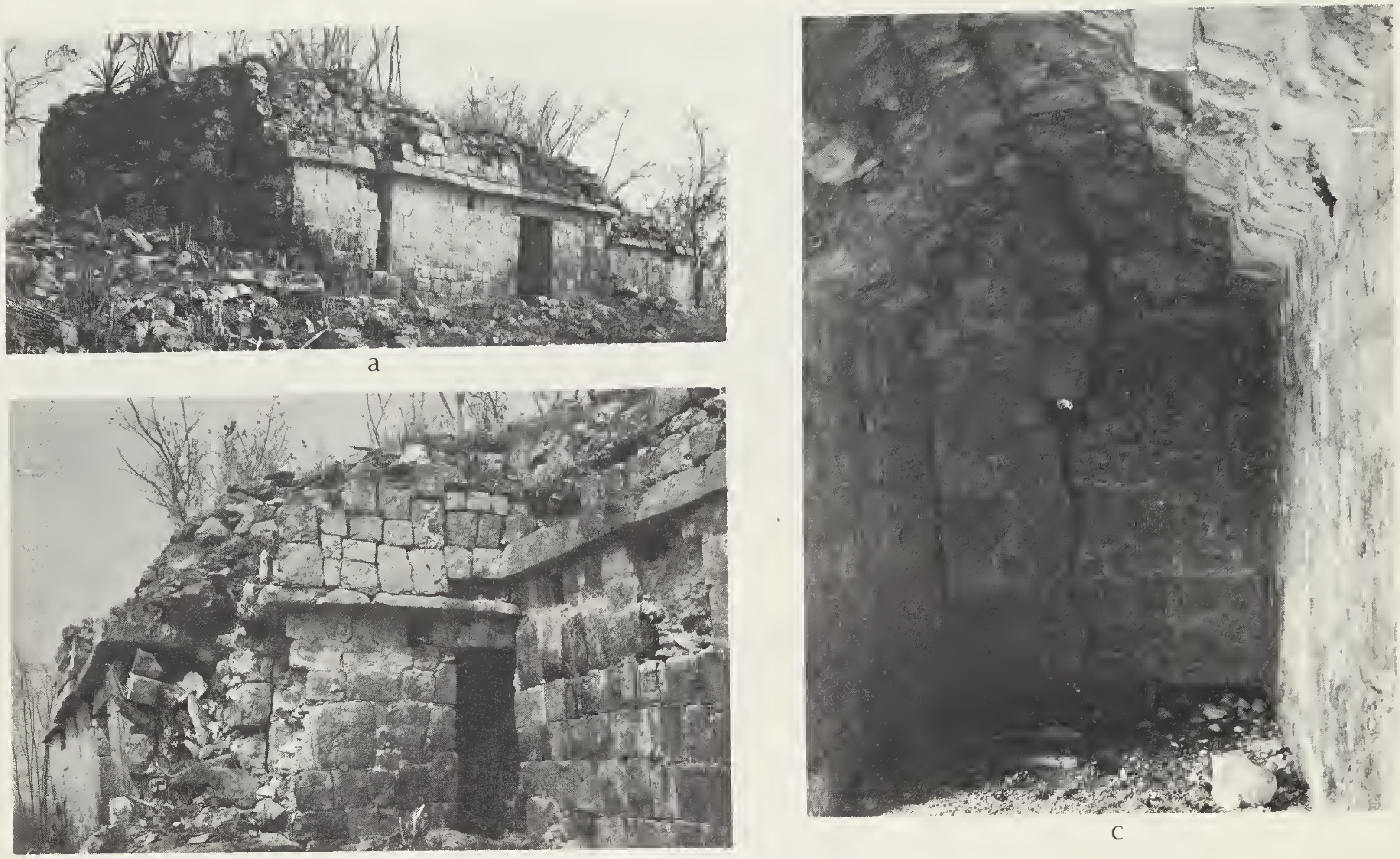
Plan. See figure 822.

Section. See figure 824.

Base Molding. Single course of moderately well-cut and faced stone .26 m high and projecting .06 m from wall above (fig. 824).

Walls. Outer walls .75–.77 m thick, medial wall about .90 m thick. Walls faced with moderately well-cut, dressed, and fitted stone (figs. 823, 825a, b) that varies greatly in size, from about .15 × .18 m to .60 × .90 m on the exposed face. Inner wall facing (fig. 825c) less well finished than outer facing.

Doorways. East and west doorways 1 m and 1.03 m wide, respectively. Jambs built of cornerstones, cornerstones separated by wall stone, and at least one full-width stone (fig. 824). Well-cut stone lintels.



a

b

c

Figure 825. Yakalmai, North Group, West Building: a, west side, looking southeast, and showing remains of north addition at left, original building at center, and rear wall of south addition at right; b, southwest corner of original building, looking northeast, and showing south doorway of Room 2 and rear wall of south addition at right; c, interior of Room 2, looking north.

Later doorway cut through south end wall of Room 2 (figs. 822, 825b). Jambs only roughly faced and no lintel, the original wall masonry bridging the opening without other support.

Wall Openings and Depressions. Two small rectangular windows or ventilators, just below level of medial molding, in east and west walls, each window spaced about halfway between doorway and end of room. Similar window at lower level at each end of each room (figs. 824, 825c).

Typical tongue-type cordholders at each side of each doorway (number and variety not recorded).

Vaults and Beams. Stepped vaulting of rough overlapping slabs trimmed at exposed ends (figs. 824, 825c). Ends of vaults also step inward. Vault stones tilted upward at exposed ends. Plentiful use of spalls between stones. Heavy prime coat of plaster used to smooth rough stone work, with fine, much thinner finishing coat on top. Vaulting comparable to examples seen at Oxkintok and elsewhere (see p. 469).

Apparently once were seven large beams in each room. Three beams .16 m in diameter, one near each end of room, one at center, just below vault spring (fig. 824). Four beams .14 m in diameter spaced evenly in row approximately half height of vault.

Moldings. Battered upper wall zone that might be thought of as heavy apron molding (fig. 824). Course of large, deeply tailed-in stone supports overhanging apron. No cornice molding remaining.

Roof. Fair amount of plastered roof surface preserved (fig. 824). Roof cap .45 m thick from underside capstones to roof surface. Normal construction.

Roof Structure. Remains of roof comb that presumably extended length of early building (Rooms 1, 2) over medial wall (fig. 824). Only lowest courses of facing stones still in place and very little debris on roof. No way of telling if roof comb was perforated variety or not.

Decoration. Fragment of west facade shows upper zone to have been paneled (figs. 825a, 826a). Exact arrangement of paneling not known (but cf. Oxkintok, Str. 3B5, p. 308).

Traces of painting, possibly of hieroglyphs, are on wall below overhang of upper facade.

NORTH ADDITION (Rooms 3, 4)

Plan. See figure 822.

Base Molding. Single course of well-cut, faced, and

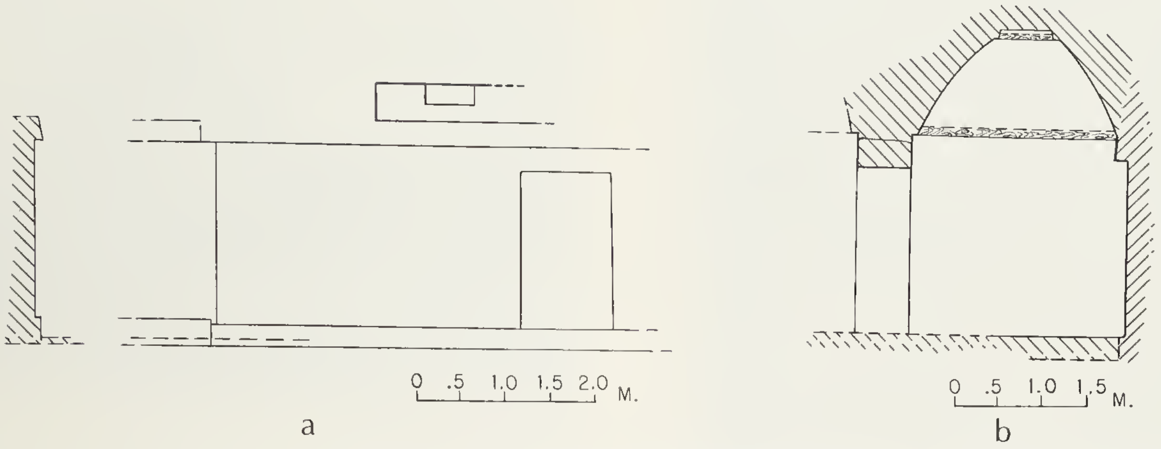


Figure 826. Yakalmai, North Group, West Building: a, section of west wall of north addition, and elevation showing joint between north addition and original building; b, transverse section through Room 3 at doorway.

fitted stone .30 m high, of which .04 m is below floor level. Molding at slightly higher level than base molding on original building (fig. 826a).

Floor. New terrace floor .07 m above old floor laid at time north addition built (fig. 826a). Some excellent hard floor preserved in Room 3.

Walls. Outer walls .55 m thick, medial wall between Rooms 3 and 4 is .60 m thick. South wall of Room 3 is old outer north wall of original building. Exterior wall masonry of well-cut, faced, and fitted stone (fig. 825a), interior walls of moderately well-finished stone. Wall stone in north addition much more regular in size and laid with fewer spalls between stones than stone in original building.

Doorways. Jambs of well-cut and finished full-width stones. Well-cut and finished stone lintels.

Vaults and Beams. Vault relatively low in proportion to width and with relatively wide span of capstones (fig. 826b). Normal curve of soffits. Vault stone semispecialized (fig. 823) and well cut, dressed, and fitted.

Beam sockets .10 m in diameter in spring course .30 m from each end of vault. Small beam sockets .06 m in diameter in corbeled courses under capstones .50 m from each end of vault.

Moldings. Only lowest course of medial molding in place. An apron member .24 m high at same level as lowest course of overhanging upper facade on original building (figs. 825a, 826a). Cannot tell whether facade treatment was same as on original building.

SOUTH ADDITION (Room 5)

Plan. See figure 822.

Base Molding. Three-member molding with colonnettes in middle member (fig. 827). Top of molding stands above base molding on original building because of greater height of molding on south addition.

Walls. Front wall .54 m thick, rear wall about .70 m thick. North wall of Room 5 is old outer south wall of original building; part of south wall of Room 5 is old outer wall of south wing. Well-cut, faced, and fitted wall stone, possibly somewhat larger but comparable to that of north addition, with the outer facing stone better finished and more carefully fitted than the inner facing (fig. 828).

Doorways. Well-cut, faced, and finished full-width jamb stones (fig. 828), and presumably a similarly well-finished stone lintel.

Vault. Well-cut, faced, and fitted semispecialized vault stone (fig. 828).

Moldings. Three-member medial molding of apron, colonnettes, and small rectangular member at top (fig. 827b) found on front (fig. 828) and rear (fig. 825b) walls of south addition. Molding rests at slightly higher level than moldings on original building and on south wing (fig. 827). No cornice molding remaining.

Decoration. Pair of banded split columns (figs. 827b, 828) on front (east) wall midway between doorway and each end of room.

SOUTH WING (Rooms 6, 7)

Plan. See figure 822.

Construction. Wall masonry of moderately well-cut, faced, and fitted stone (fig. 828). Doorjambs built of cornerstones that support a fairly well-cut and finished stone lintel. Only lowest course, an apron member, of medial molding remains (figs. 827b, 828).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Rooms 3, 4, and 5 are obviously later constructions than the original building (Rooms 1, 2). This is shown by the walls of Room 3, which butt against the old outer facing of the north wall of the original building, and the walls of Room 5, which butt against the old outer facing of the south wall (fig. 822). In the construction of Room 3, the upper north facade of the original building was torn down above its lowest course, and that course was then employed as the spring of the south foot of the vault of the new room (fig. 823). Room 5 is also clearly secondary to the south wing (Rooms 6, 7), as shown by the incorporation of the northwest corner of the once-separate south wing into the south wall of Room 5. Lastly, the doorway at the south end of Room 2 was opened at some time after

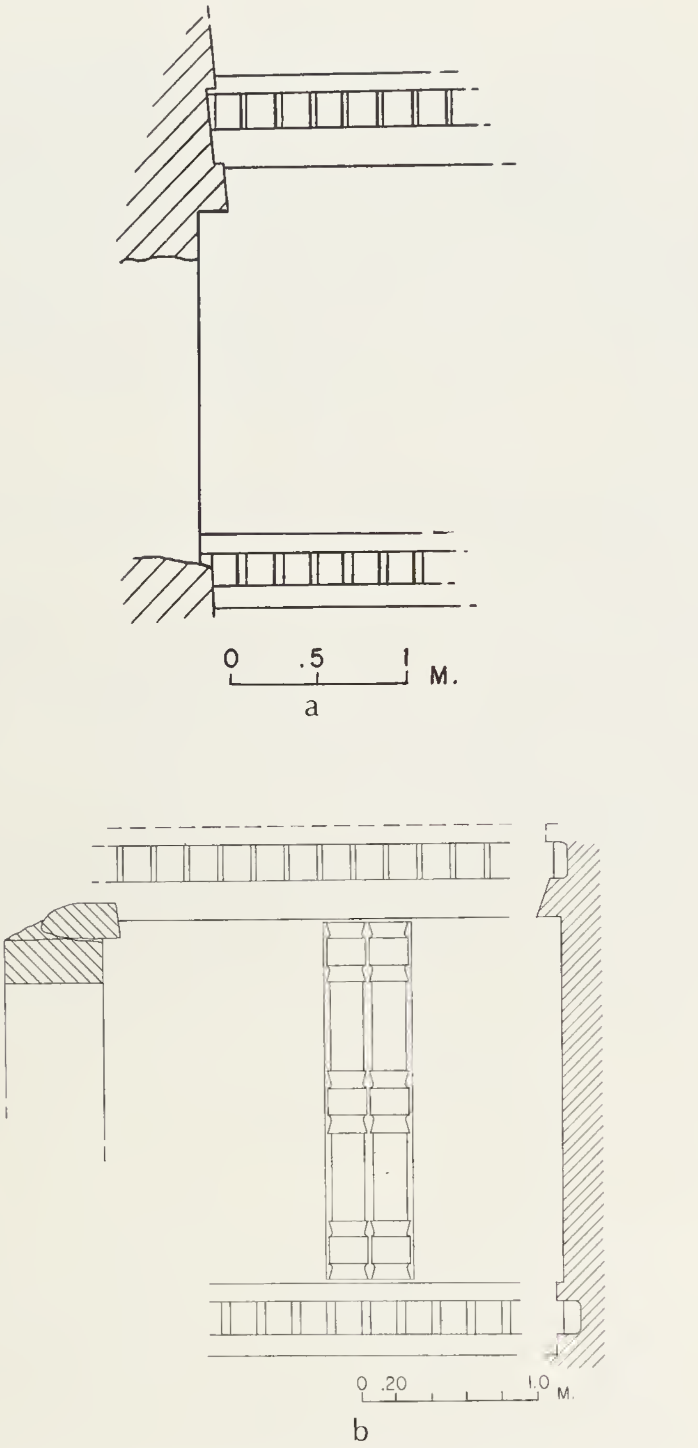


Figure 827. Yakalmai, North Group, West Building: a, section through south doorway of Room 2 and elevation of west wall of south addition at juncture with original building; b, section through doorway of Room 6, and elevation and section of east wall of south addition at juncture with south wing.

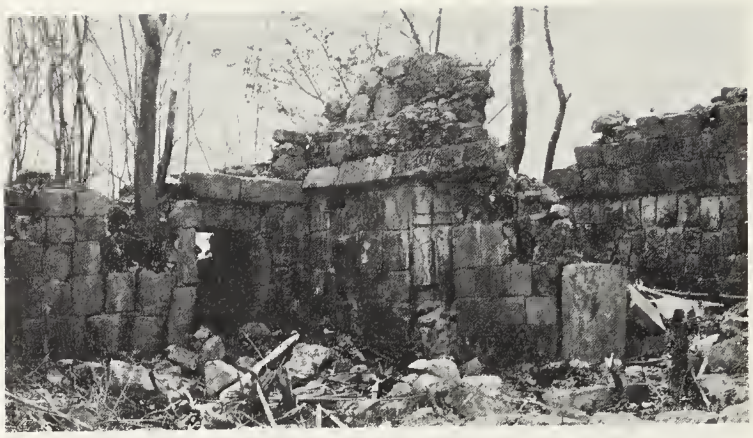


Figure 828. Yakalmai, North Group, West Building. Juncture of south addition and south wing, looking west, and showing doorway to Room 6, fragment of east facade of south addition, south doorjamb of doorway to Room 5, and part of rear wall of Room 5.

the original wall was built (see p. 492, above) and thus is also a secondary operation.

Without extensive trenching of floors, one cannot be certain of the complete building sequence here. On stylistic grounds (more elaborate moldings, decorative facade columns) I believe the south addition (Room 5) to be later than the north (Rooms 3, 4), but am not certain. I also suspect that the south addition was built after the doorway was cut through the south wall of Room 2, but again am not certain. So little remains of the south wing (Rooms 6, 7) one hesitates to guess its position in the sequence, beyond its clear relation to Room 5. Judging by the thinner walls and the better shaped and finished first course of the medial molding of the south wing, I am placing it later than what I have called the original building (Rooms 1, 2). On the shaky evidence of small-stone doorjambs contrasted with full-width jamb stones, and of slightly poorer wall masonry in Rooms 6, 7 than in Rooms 3, 4, I suspect the south wing to be earlier than the north addition.

The sequence I am guessing is, then, from early to late: (1) original building (Rooms 1, 2), (2) south wing (Rooms 6, 7), (3) north addition (Rooms 3, 4), (4) south addition (Room 5).

MISCELLANEOUS NOTES

On a hill southwest of the North Group we observed the remains of a building that carried a three-member medial molding typical of this region (fig. 829). No elements of facade masks were seen at Yakalmai but the site was not well explored. A number of typical monolithic altars were noted.

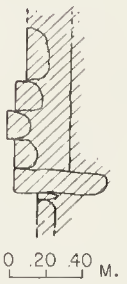


Figure 829. Yakalmai. Building on hill southwest of North Group. Section of medial molding.

Xkalachetzimin

ETYMOLOGY

According to our native laborers, *xkala,* enclosure; *che,* tree or wood; *tzimin,* horse; i.e., horse corral of wood (and see Martinez 1929, p. 489, *kal ah, kalab;* p. 300, *chee;* p. 263, *tzimin*).

SITUATION

Seven or 8 km west of Cumpich, about 5 km west-by-south of Xcucsuc, 6 km northwest-by-north of Xcalumkin, and 7 km east-northeast of Hecelchakan.

TOPOGRAPHY

Site located on top of steep hill on north side of small savanna of Xkalachetzimin, from which ruins take their name.

WATER SUPPLY

No nearby natural water source known. No chultuns seen but undoubtedly present. Nearest modern water supply probably at Hecelchakan.

SIZE

Small site of possibly a half-dozen buildings.

CIVIC PLAN

Too small a site to think of civic plan in the usual sense. Ruins are a group of buildings that occupy two steep hillside terraces on the southern slope near the top of a hill, and a small courtyard with several structures at the summit. A notable characteristic of the site is the concentration of buildings in a small area over steep terrain.

Lower Terrace

Unusual, partly standing structure of five parallel rooms with north-south axes and a sixth room at east with east-west axis. North ends of rooms are founded on bedrock of hillside. Walls run from about .50 to .75 m thick and are faced with fairly well-cut, dressed, and fitted stone, the outer facing somewhat better finished than the inner (fig. 830). Doorways are built of full-width jamb stones and stone lintels. Third room from west has bench with rectangular molding across front at north end where bench covers rise of bedrock (fig. 831b). Vaults of fairly well-cut, faced, and fitted, nonspecialized and semispecialized stone (figs. 830, 831a). Rather wide capstones. Traces of band of blue paintings, possibly hieroglyphs, on wall below spring of vault in second room from west. Building apparently represents two periods of construction, but little information gained from the architectural sequence.

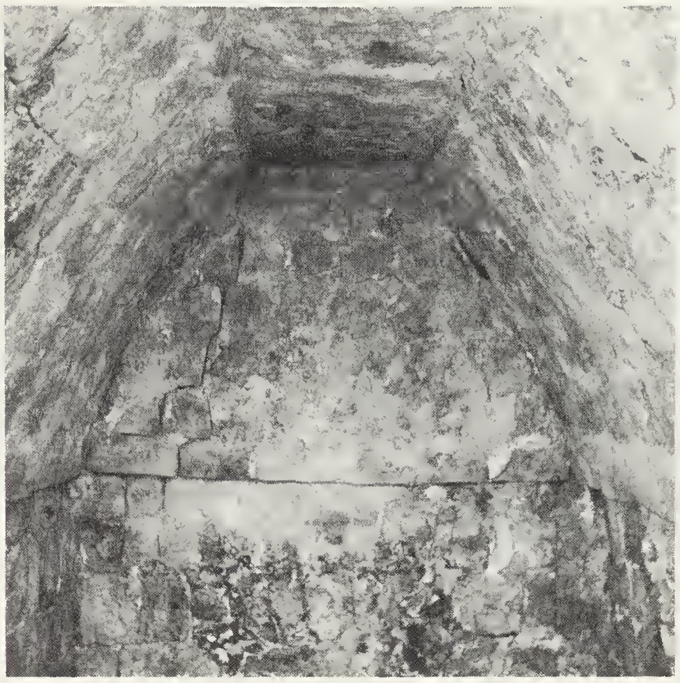


Figure 830. Xkalachetzimin, Lower Terrace. North end of second room from west.

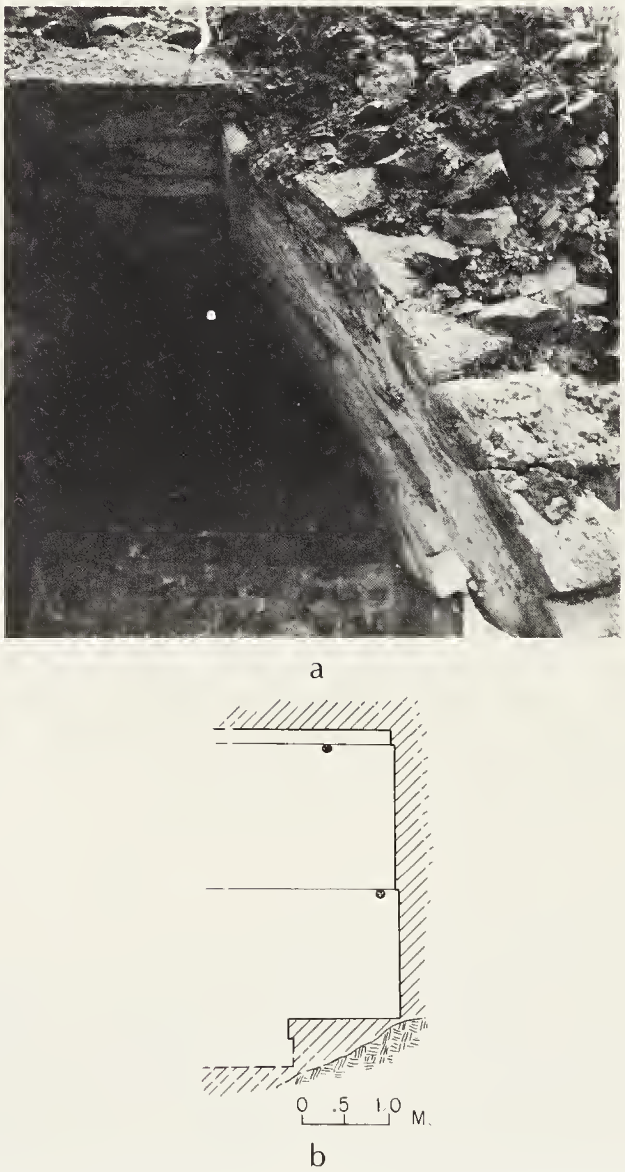
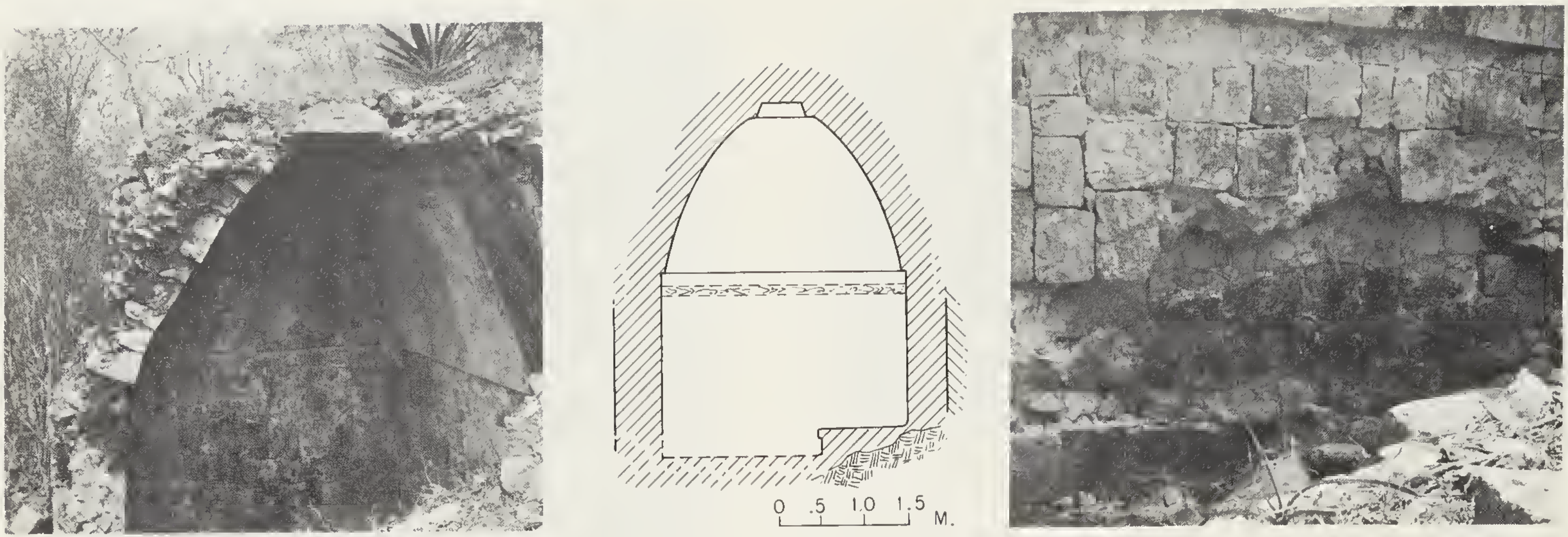


Figure 831. Xkalachetzimin, Lower Terrace. Third room from west: a, section of vault; b, section of north end of room, showing bench covering bedrock.



a b c

Figure 832. Xkalachetzimin, Upper Terrace: a, end of room and section of vault, looking west; b, transverse section, showing bench covering bedrock, and earlier buried wall; c, buried wall, looking north.

Upper Terrace

Building of several rooms with east-west axis and facing south. North wall of rooms rests on bedrock and terrace before rooms is on level of, and partly formed by, roof of structure on Lower Terrace. Front wall .52 m thick. Wall facing of well-cut, dressed, and fitted stone on exterior and less well-finished stone on interior of rooms (fig. 832a, c). Doorways employ full-width jamb stones and stone lintels. Bench with rectangular molding on front runs length of rear (north) wall of one room, hiding rise in bedrock beneath (fig. 832b). Vaults built of well-cut, faced, and fitted, but largely nonspecialized stone (fig. 832a). Buried and obviously earlier wall exposed at one place behind north wall of one room (fig. 832c). Facing of earlier wall is of more roughly cut, dressed, and fitted stone than in later building, and there is considerable chinking between stones.

Summit Court

Only the northern of several structures that form this court is sufficiently preserved to offer any information without excavation.

NORTH BUILDING

SUPERSTRUCTURE

Plan. See figure 833a. Sketch plan.

Base Molding. Simple course of stone projecting .04 m from wall above. Height of molding not measured.

Walls. Outer walls .51 m thick. No measurement of medial wall but presumably somewhat heavier than outer walls. Well-cut, dressed, and fitted facing stone that is relatively small (fig. 834a) and comparable to that in the North Building of the North Group at Cacabxnuk (see p. 458).

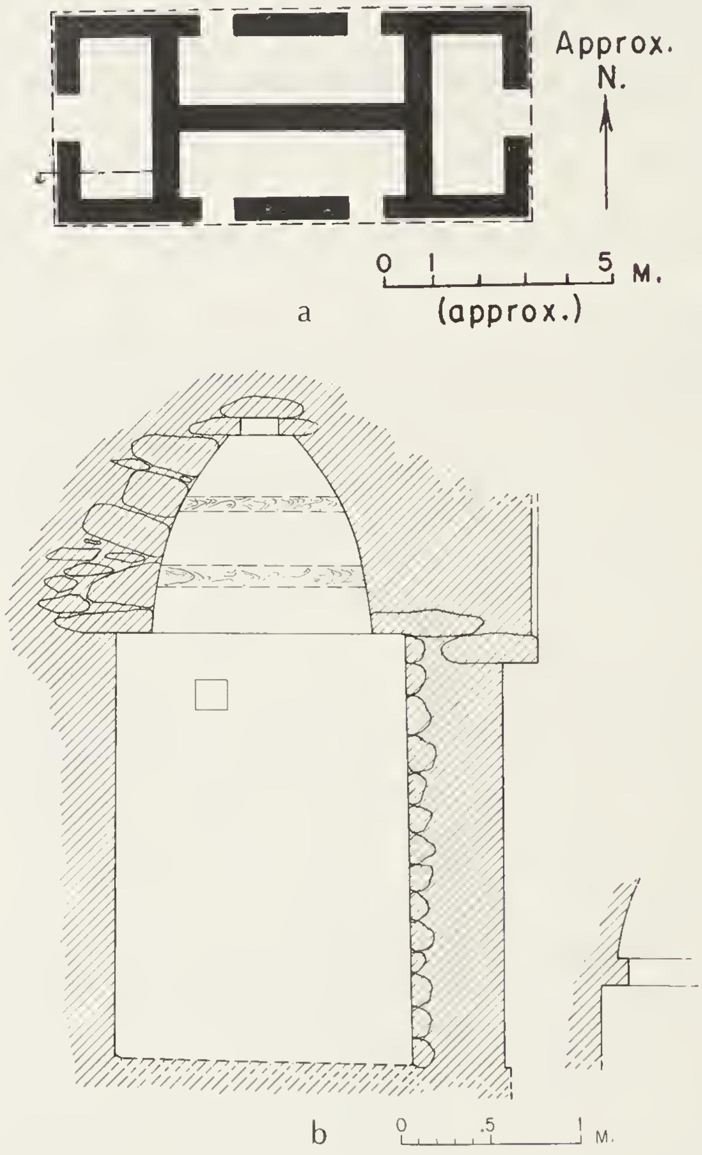
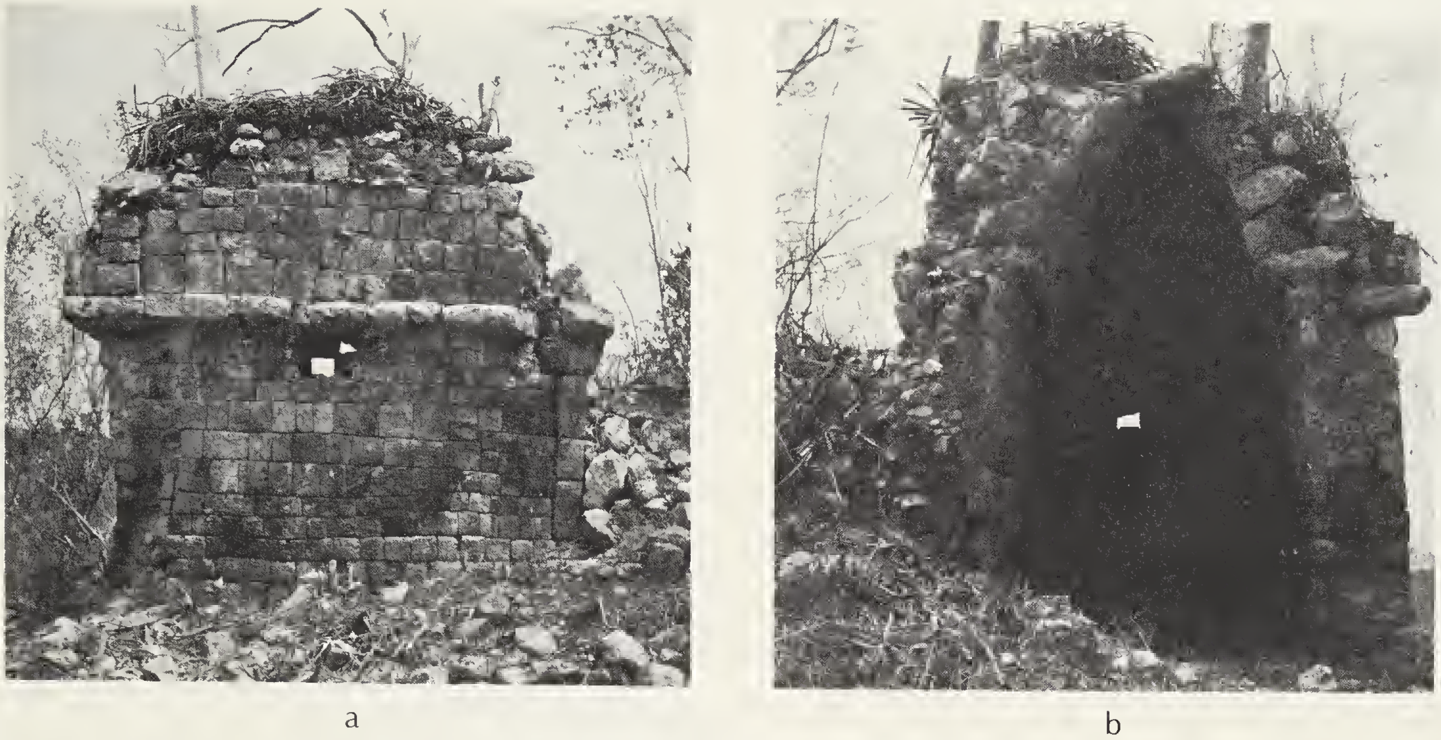


Figure 833. Xkalachetzimin, Summit Court, North Building: a, sketch plan; b, transverse section through west room, and (lower right) detail of spring of vault in south room.



a

b

Figure 834. Xkalachetzimin, Summit Court, North Building: a, remains of south facade, looking north; b, west room, looking south.

Doorways. Jambs built of two vertical courses of cornerstones with considerable use of spalls between stones. Stone lintels.

Wall Openings. Small rectangular windows or ventilators two courses below spring of vault (fig. 833b), or one course below medial molding (fig. 834) in north, south, and west walls of west room. Presumably similar windows in other rooms.

Vaults and Beams. Rather crude vaulting of roughly faced and fitted, nonspecialized stone with plentiful use of spalls between stones (figs. 833b, 834b). Spring course projects from soffits of vault and ends of vault (fig. 833b, detail) in south room, a most unusual feature (but see Xcorralcot, p. 522, below).

Two beams, one .60 m from each end wall, at one-third height of vault, and one central beam at two-thirds height of vault of west room (fig. 833b).

Moldings. Simple rectangular medial molding supports vertical, paneled upper facade or frieze (fig. 833b). Plane of upper facade is raised at corner of building to be flush with face of molding and to frame end of panel (fig. 834a). No cornice molding left intact.

Decoration. Stone tenons projecting from paneled upper facade presumably supported stucco decoration, none of which remains.

MISCELLANEOUS NOTES

No elements from facade masks or any carved-stone architectural decoration were seen at Xkalachetzimin. None of the common monolithic altars was observed but some may well be present.

Xcorralche, near Pocboc

As Xcorralche seems to be a not uncommon place-name, and there is at least one other ruin by this name in the literature (Muller 1960, pp. 48–49), I am identifying the present site as near Pocboc, a town on the Campeche-Merida railroad. The ruin takes its name from the savanna of Xcorralche.

ETYMOLOGY

According to our Indian laborers, and confirmed by Roys (personal communication), *xcorral,* corral; *che,* tree or wood; i.e., corral of wood. Brush fences are common in Yucatan and northern Campeche.

SITUATION

Approximately 9 km west-northwest of Cumpich, 3 km west of Yakalmai and the same distance northwest-by-north of Xkalachetzimin, and 5 km southeast-by-south of Pocboc.

TOPOGRAPHY

Ruins located on tops of hills and ridges that overlook several savannas, each seemingly at a different elevation. The largest savanna, Xcorralche, for which the ruins are named, lies to the south. Half a kilometer or so to the north of the savanna of Xcorralche, and separated from it by several ridges, is another good-sized savanna that appears to be at a somewhat higher elevation than the southern one. Between these two, in a high cup of land between ridges, is a third little savanna that is overlooked by all the groups that form the ruins of Xcorralche.

WATER SUPPLY

No natural water supply near ruins, but the site is not far (4–5 km) from the western plain where there undoubtedly were water sources in aboriginal times. Usual number of chultuns seen in courts and terraces. Nearest modern water supply at Pocboc (see above) or at hacienda of San Luis, 4–5 km to the north.

SIZE

Two small groups of structures and a central pyramid spaced over a distance of about .5 km.

CIVIC PLAN

No very obvious relation among the three hilltop groups, which lie in a generally north-south line, unless it is the central location of the temple. Primary orientation of north group seems to be toward pyramid temple. Primary orientation of south group not known.

SOUTH GROUP

This group is situated on top of a high hill that looks south across the savanna of Xcorralche and north over the small elevated savanna mentioned above. The best preserved of the three groups, it consists of a small court with partly standing buildings on the east and south sides and fallen structures on the north and west. The eastern building is in the best state of preservation.

East Building

Structure rests on raised platform that was approached from court at west by broad stairway. Fair amount of original building of four rooms, which faced west on court, is standing, but secondary addition at east is mainly fallen.

SUPERSTRUCTURE

Plan. See figure 835a.

Walls. Thickness of outer longitudinal walls .78 m, of end walls .66 m, of inner transverse walls .80 m, of medial wall 1.02 m. Facing is of moderately well-cut, dressed, and fitted stone, somewhat variable in size, the outer facing a little better finished than the inner (figs. 836, 837a).

Doorways. Jambs built of cornerstones and wall stones. Stone lintels. East doorway blocked with masonry, presumably at time of secondary addition to building (see Secondary Construction . . . , below).

Wall Openings and Depressions. Small rectangular window or ventilator just below medial molding and one course below spring of vault in end of each room (fig. 835b, c). Two such openings in south wall of building (fig. 836) were probably duplicated in north wall and old outer east wall of original east room.

Dumb-sheave type of cordholder (cf. fig. 776a) inside and just east of south doorway.

Vaults and Beams. Crude vaulting (fig. 837) like that seen at Kupaloma and Cacabxnuc (see p. 459). Offset on all sides of room at level of spring but no projecting corbeled courses under capstones (fig. 835b, c).

Two beams one-third height of vault, one near each end, and one beam two-thirds height of vault at center in south room (fig. 835c). Lower pair of beams seems to have existed in west room and presumably in east room of original building (fig. 835b). These rooms may each have had higher beam, centrally located. Assume north room to have possessed same arrangement of beams as south room.

Moldings. Only lowest course of medial molding, a heavy rectangular member, is preserved (figs. 835c, 836, 837b). No cornice molding remains.

Roof Structure. Perforated roof comb, .85 m thick at base, located over medial wall and presumably extended

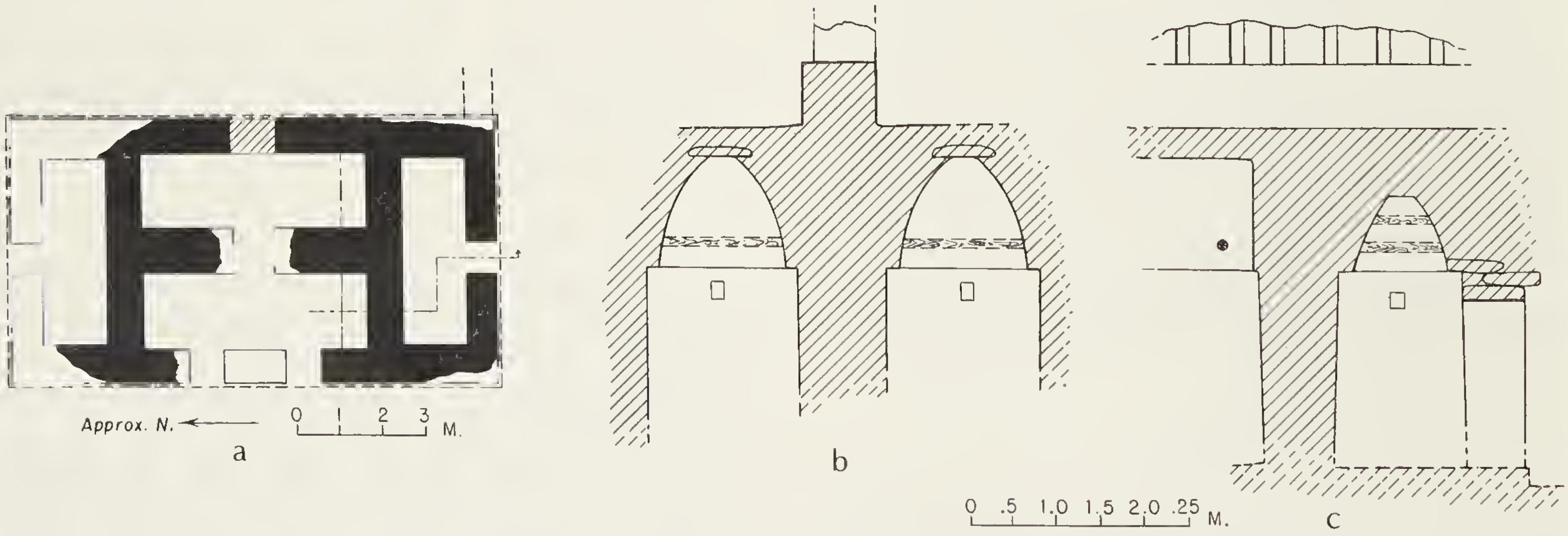


Figure 835. Xcorralche, South Group, East Building: a, plan; b, section through west and east rooms; c, section through end of west room and south room, and elevation of fragment of roof comb.

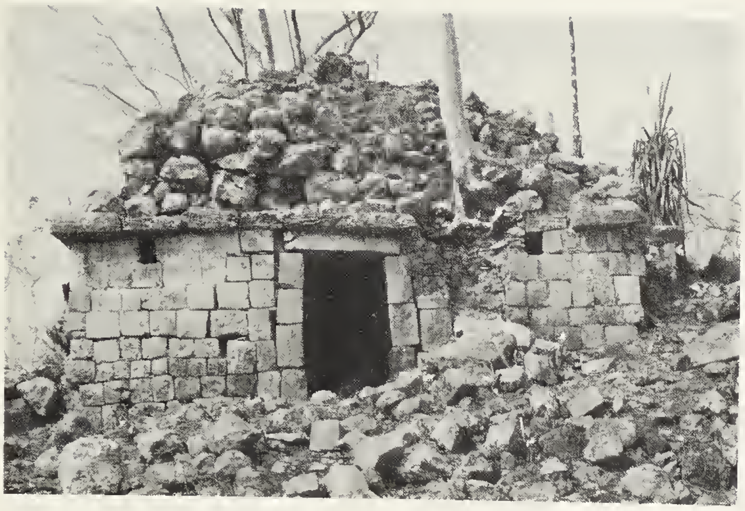


Figure 836. Xcorralche, South Group, East Building, south end, looking north.

length of building (fig. 835b). Base of roof comb solid, above which was line of narrow rectangular windows (fig. 835c). Original height of structure unknown. Roof comb faced with cut and dressed stone like that on walls of building.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

At some time after the structure described above was built, its east doorway was filled with masonry, and an addition was constructed that seems to have run the full length of the old building and have been entered from the east. This secondary addition is now fallen, but inspection of the debris shows that the wall masonry was of larger stone, better cut, faced, and finished than in the old part of the building, and that the doorjambs were made of full-width, well-cut and dressed stones.

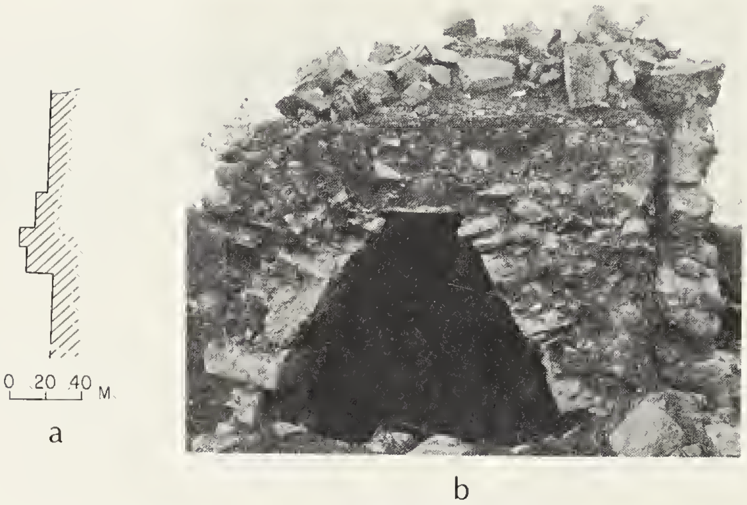


Figure 838. Xcorralche, South Group, Southwest Building: a, section of medial molding, b, vault masonry seen in section, looking west.

Southwest Building

At the southwest corner of the court is a partly standing building whose plan is obscure, but a vault, fragment of medial molding, and trace of roof comb may be seen. The vault stones are shaped, dressed, and moderately well fitted, but nonspecialized (fig. 838b). There are the usual corbeled courses below the capstones. The medial molding is of three rectangular members, a common form in this area (fig. 838a). The roof comb, which is faced with dressed stone, seems to be located over a medial wall of the building below.

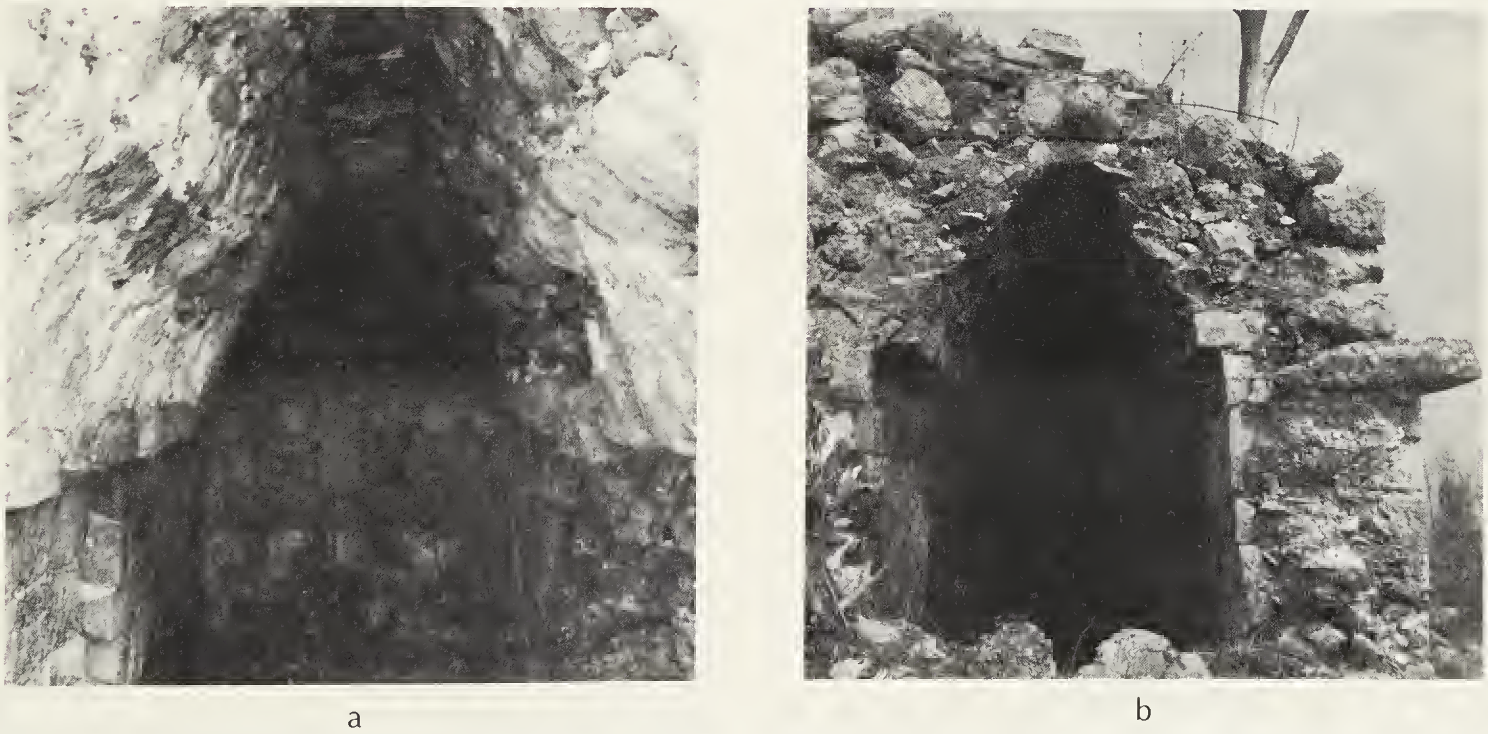


Figure 837. Xcorralche, South Group, East Building, south room: a, interior, looking east; b, wall and vault masonry seen in section, looking east.

West Building

The debris of an almost totally fallen structure on the west side of the court shows the masonry to have been of large, well-shaped and finished wall stone and full-width well-dressed jamb stones, comparable to the masonry of the secondary addition to the East Building (see above).

CENTRAL GROUP

A ridge runs northward from the hill supporting the South Group, and at a distance of maybe 400 m another ridge reaches to the east. The Central Group is situated on the more easterly ridge where it looks south across the little elevated savanna between it and the South Group, and north over a larger and lower savanna (see Topography, above). The group seems to be limited to a pyramid supporting a much-destroyed temple and several mounds and platforms near the base of the pyramid. Unfortunately, destruction is such that one cannot tell in what direction the pyramid temple faced.

NORTH GROUP

Still another high ridge runs north or north-northwest from the Central Group, skirting the western edge of the northern savanna (see Topography, above). On the crest of this ridge, at a distance of about 250 m, is the North Group. It consists of a court with structures on three sides, the south side being open. Presumably the primary orientation of the group was to the south toward the pyramid temple. The building on the east side of the court is partly standing and one can see that the wall masonry and crude vaulting are like the masonry and vaulting in the East Building of the South Group (see above).

MISCELLANEOUS NOTES

No elements of facade masks or cut-stone architectural decoration of any variety were seen at Xcorralche. Several monolithic altars were observed in the South Group but not otherwise recorded.

Other Sites

Becal

Town on railroad 26 km south of Maxcanu by rail and about 17 km air line; 32 km north of Hecelchakan and 87 km northeast of Campeche. The town lies at the foot of a pass through the western Puuc hills.

Becal is an old town of pre-Spanish origin in the ancient province of the southern Ah Canul (see Roys 1957, p. 19). Case (1911, p. 55), Marquina et al. (1939, p. 13), and Muller (1960, p. 22) report ruins in the village. I have not examined the place but the station platform is paved with ancient stone, presumably from nearby ruins. The stone appears to be from Puuc-style buildings and is probably of a much earlier period than the Ah Canul settlement.

Tepakan

(Tepakam, Tepacan, Tipakam)

Village on railroad 5 km south of Becal (see above). A pre-Conquest settlement (see Becal, above; and Roys 1957, pp. 19–20). Muller (1960, p. 47) reports mounds in the village.

Xmop

(Mopila ?)

Settlement about 5 km northwest of Tepakan (see above). Incorrectly located on Muller (1960) map. Situated on plain (Roys 1957, p. 20) and outside of area covered by this report.

Pakante

Muller (1960, p. 40) places this site southeast of Tepakan (see above) and near the railroad. She lists the presence of mounds and gives as her source a newspaper article not available to me.

Calkini

(Kalkini)

Town on railroad 8 km south of Becal (see above) and 24 km north of Hecelchakan.

An important pre-Conquest settlement in the province of the southern Ah Canul (see Roys 1952, p. 150). The colonial church and convent at Calini are built on an old Maya substructure (ibid.), and much ancient building stone, apparently from Puuc-style architecture, is seen in the pavements of the town. Two sculptured columns, of which the provenience is listed as Calkini, are in the Museum of Archaeology in Merida.

M1. Sculptured stone column (see Proskouriakoff 1950, fig. 105a). Height 1.75 m, diameter .45 m. In Museum of Archaeology, Merida, Yucatan.

Badly weathered human figure that occupies about one-half circumference of column. Relief is somewhat higher than usual but there is no attempt at modeling. Old museum description read: "Fragment of column with figure of warrior. Provenience: Unknown. Was in the old museum." Later museum description reads: "Monolithic column with human figure in relief, badly damaged; broken in two pieces and partly reconstructed. Approximate height 1.75 m, diameter at the center .50 m. Provenience: Calkini, Campeche."

The provenience is suspect. See Proskouriakoff 1950 (p. 169) for discussion of sculpture.

M2. Sculptured stone column (ibid., fig. 105b). Height .95 m, diameter .37 m. In Museum of Archaeology, Merida, Yucatan.

Badly weathered human figure that occupies about one-half circumference of column. Relief of carving is like that on sculpture M1 (see above). Old museum description read: "Figure of idol. Provenience: Calkini. State of Campeche." Later museum description reads: "Fragment of monolithic column, broken in two, partly reconstructed, with human figures in high relief, badly damaged. Approximate height .96 m, approximate diameter .47 m. Provenience: Calkini, Campeche."

Lower part of column apparently missing.

Dzitbalche

(Citbalche, Zitbalche, Dzitbalchen, Dzibalche)

Town on railroad 6 km south of Calkini (see above) and 18 km north of Hecelchakan.

A pre-Conquest town like Becal and Calkini (see above). Roys (1957, pp. 23–24) calls attention to the probability that the raised platform that supports the church is of pre-Spanish origin. The church itself, as well as pavements and other buildings in town, incorporate in their masonry many stones that seem to be of aboriginal manufacture. The stone is most probably the work of Puuc stonecutters and of an earlier time than the Ah Canul settlement.

Bacabchen

(Becanchen)

Village about 3 km south of Dzitbalche. Another ancient settlement in the province of the southern Ah Canul (see above). Roys (1957, p. 24) observed a number of ancient structures and "cylindrical column drums of the Puuc type and many smoothly surfaced wall stones" in the village. On the first high hill to the north-northeast of Bacabchen may be seen a large pyramidal mound.

I do not know whether there is a cenote or ancient well in the town, but the name Bacabchen means well of the Bacab (ibid.).

Pocboc

(Pokboc, Tixpokboc)

Village on railroad 10 km south of Dzitbalche (see above) and 8 km north of Hecelchakan. A southern Ah Canul town like those mentioned above (see Roys 1957, p. 23). Railroad station stands within a group of mounds that have largely been stripped of worked stone for the station platform and streets of the village. Stone appears to be of Puuc origin.

Hecelchakan

(Xecelchakan, Xequelchakan, Heselchakan)

Town on railroad 24 km south of Calkini and 55 km northeast of Campeche. Another pre-Conquest town of the southern Ah Canul (see above, and see Roys 1957, pp. 24–25). Muller (1960, p. 33) reports mounds in the town, and we observed faced stone, seemingly from Puuc-style buildings, in the railroad station platform, in streets, and in the walls of houses. A stone sculpture that is said to have been found in Hecelchakan is in the Campeche Museum:

M1. Anthropomorphic stone figure (fig. 839).

In Archaeological, Ethnographic, and Historical Museum, Campeche.

Somewhat weathered and defaced sculpture of squatting human or simian figure with mask of head and gaping jaws of reptile from which peers a badly eroded face of monkey (or death's-head). Museum description (Pavon 1942, p. 21, no. 7) is "Maya culture. Provenience: Unknown. Height: 1.25 m. Width: .38 m. Thickness: .58 m. Sculpture found in Hecelchakan. Represents a crouching idol and is badly damaged owing to erosion."

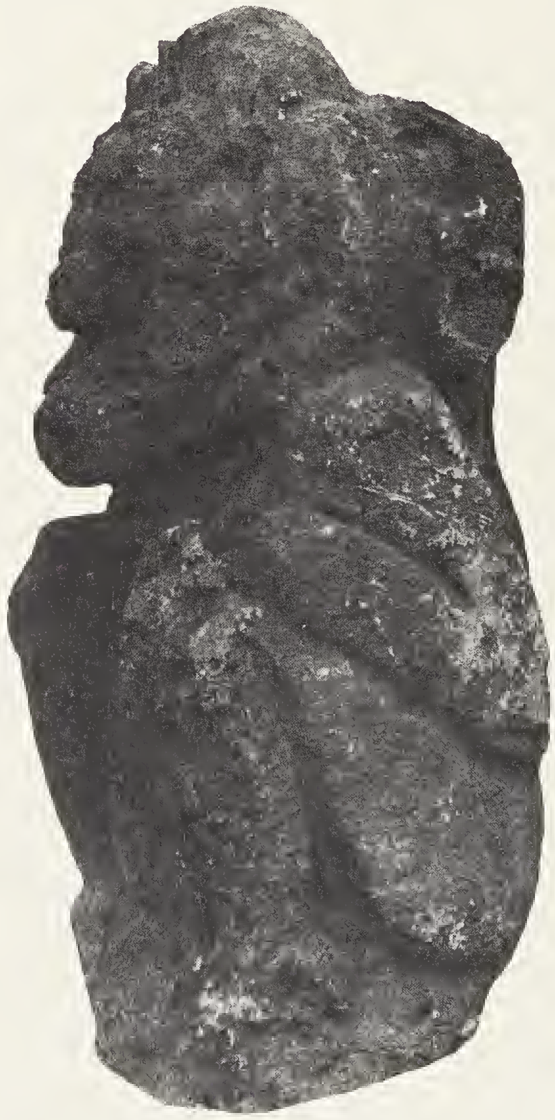


Figure 839. Hecelchakan. Miscellaneous sculpture, M1, squatting human or simian figure of stone.

In 1965 there was established in Hecelchakan a regional museum of archaeology that contains a considerable number of architectural sculptures. At the time of my hurried visit to the museum in 1972 I was unable to discover the provenience of these specimens but have since determined that two doorway columns sculptured with hieroglyphs are from the south doorway of the Middle Building in the Hieroglyphic Group at Xcalumkin (see p. 441). I suspect that many of the sculptures are from Xcalumkin or nearby ruins.

El Rosal

Ruz (1945, map) shows this site 3–4 km southeast of Hecelchakan but does not mention it in text. Muller (1960, p. 32) reports ''mounds'' at the site and cites an unpublished manuscript by Ruz, which I have not seen, as her source. Pavon (1942, p. 40, no. 92) briefly mentions the fragment of a sculptured doorjamb from El Rosal now in the Archaeological, Ethnological, and Historical Museum of Campeche.

7 · The Southern Ruins

South of Hecelchakan the Puuc hills run south-southwest and southwest to end somewhere beyond the seacoast city of Campeche. Back of this chain of hills, which is to say to the east and southeast, is a region of isolated hills and ridges, of wooded valleys, and of fairly extensive savannas, much like the country around Xcalumkin and further north, but seemingly with a greater occurrence of savanna. As was true of the northern area, the region is replete with ruins, many of which are yet to be reported and were observed by us only from a distance. The character of the architecture and the range of its style are much the same as that of the northern sites we have just described, and, with the possible exception of the single site of Acanmul (see frontispiece), there is no reason to distinguish this southern group of ruins from those immediately to the north. The division here is merely for ease and orderliness of description.

Kanalku

ETYMOLOGY

Our native laborers gave the meaning yellow nest, a translation confirmed by Roys (personal communication). Roys notes that *ku* can mean brush pile as well as nest. Variant spelling: Kanaku, Xkanalku.

SITUATION

Four km east of the town of Pomuch, 5 km south of Hecelchakan, and about 11 km west and slightly south of Xcalumkin.

TOPOGRAPHY

Hilltop site overlooking valleys with savannalike vegetation to north and south. About 800 m south of ruins, near center of valley, is large aguada of Xkanalku, from which site takes its name.

WATER SUPPLY

Only natural water known is agauda mentioned above, which is silted up and without water during dry season, but may have been a more dependable supply in ancient times. Chultuns were seen at hilltop ruins. Modern wells at Pomuch and presumably at abandoned hacienda of Humpeskin about 2 km east of aguada.

SIZE

Two hilltop groups, one of fair proportions, but site as a whole is small. Few mounds on valley floor at foot of hills. Other hilltop ruins seen to north-northeast and northeast at distances of 1.5 to 2.5 km.

CIVIC PLAN

Courtyard arrangement of buildings on hilltop platforms and terraces. Primary orientation of main group seems to be toward south.

MAIN GROUP

Large substructural platform or terrace on top of high hill supports good-sized group of fallen buildings around its edge. North mound, which is largest and highest and dominates the group, faces south on court formed by surrounding structures. Small amount of terrace wall of pyramidal substructure of north building shows masonry to be of roughly shaped and poorly fitted stone (fig. 840). Nothing remains of superstructure but few well-cut and faced stone in debris. In court in front of (south) north mound lay an oddly shaped stone of uncertain use and origin (see M1, below), and near the southern end of the court a rectangular altar (see Altar 1, below).

On the east side and near the base of the substructural platform just mentioned is a small court surrounded by fallen buildings. Enough remains of the building on the south side of the court to show a three-member base molding with colonnettes in the middle member (fig. 841a) and in the debris of the structure are found well-cut and faced wall stone, semispecialized vault stone, banded split columns from the facade, and carved geometric elements of the familiar step-and-fret design (fig. 841b) that are very probably from a molding. In the court north of this building were found Altars 2 and 3 (see Monuments, below).

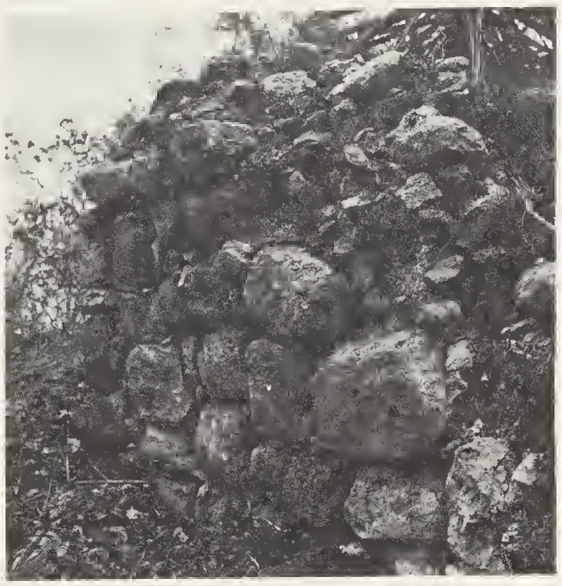


Figure 840. Kanalku, Main Group, North Mound. Masonry of terrace wall.

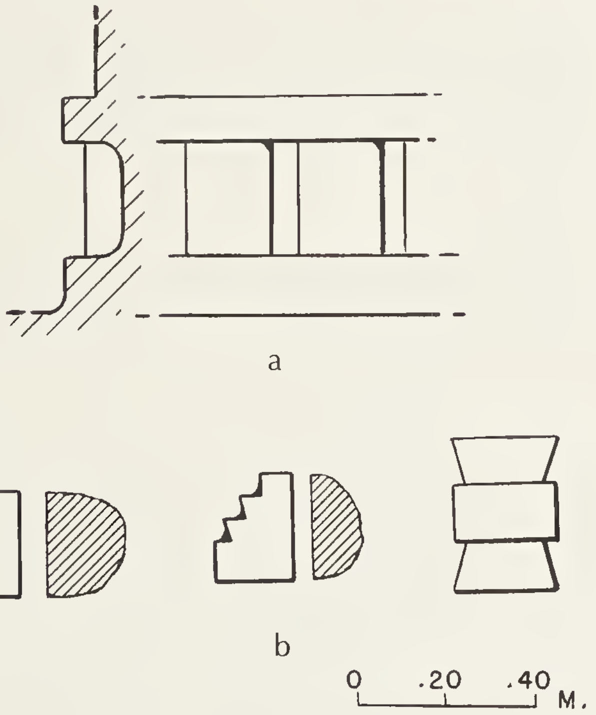


Figure 841. Kanalku, Main Group, East Court, South Building: a, section and elevation of base molding; b, fallen elements of facade decoration.

EAST GROUP

Short distance east of Main Group and also on hilltop is another group of fallen buildings surrounding a court. Occasional fragment of standing masonry showed well-cut, faced, and fitted wall stone, well-cut full-width jamb stones, doorway columns .48 m in diameter by 1.54 m in height, and well-worked fairly specialized vault stone. Observed were banded split columns (cf. fig. 841b), colonnettes presumably from moldings, and typical column altars, one of which was measured and drawn (see Altar 4, below).

MISCELLANEOUS SCULPTURE

M1. Broken T-shaped stone (fig. 842a). Present maximum height .32 m; present width at top .46 m, at bottom .38 m; thickness at top .26 m, at bottom .21 m. Found in court before north mound of Main Group.

Function unknown but in shape stone bears superficial resemblance to roof crests shown in wall painting at Uaxactun (see A.L. Smith 1950, fig. 112, upper left; and see Xcucsuc, South Group, West Court, West Building, p. 488, above, and Xcocha, Southeast Group, p. 513, below).

M2. Stone phallus (fig. 842b) reputedly from Kanalku. Maximum width .22 m, height of head .26 m, width of shaft .15 m. Set in street in front of house in Pomuch.

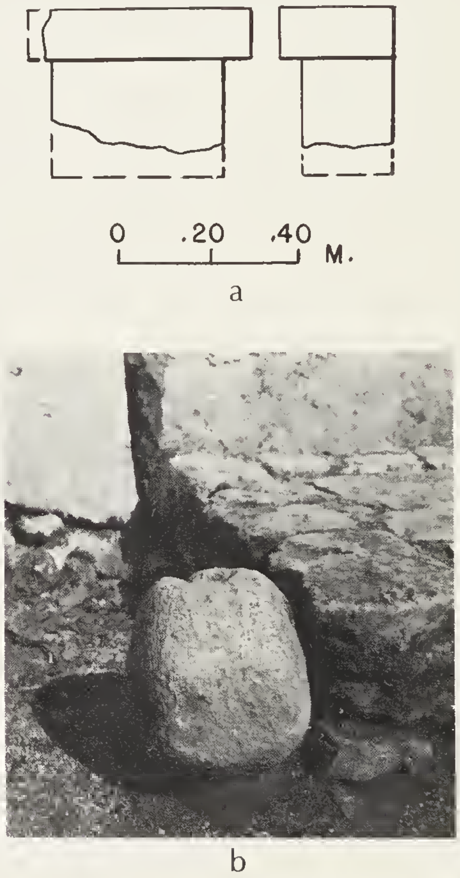


Figure 842. Kanalku. Miscellaneous sculpture: a, M1, carved stone of unknown function; b, M2, head of stone phallus in street in Pomuch.

MONUMENTS

ALTARS

A number of monolithic altars, four of which were recorded, were seen at Kanalku.

Altar 1. Plain (fig. 843a). Height .90 m, width .58 m, thickness .50 m. Lying at south end of main court of Main Group. Simple, well-worked rectangular stone.

Altar 2. Carved (fig. 843b). Height .53 m, width .38 m, thickness .38 m. In east court of Main Group, just

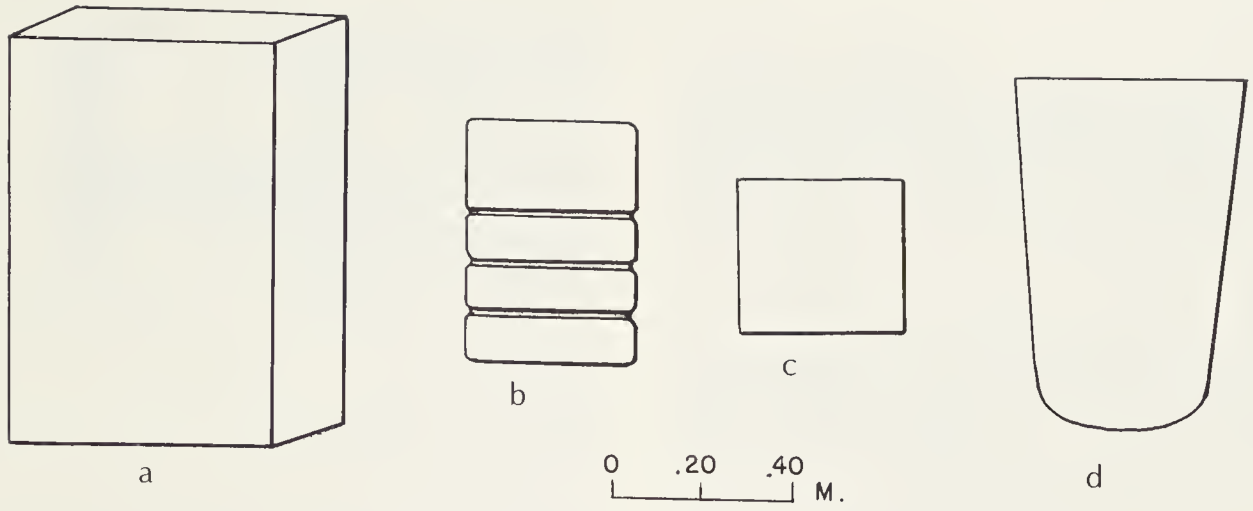


Figure 843. Kanalku. Altars 1–4. a, Altar 1; b, Altar 2; c, Altar 3; d, Altar 4.

north of south building. Parallel incised lines on sides of square altar.

Altar 3. Plain (fig. 843c). Height .34 m, diameter .37 m. Near Altar 2 (see above). Cylindrical drum altar.

Altar 4. Plain (fig. 843d). Maximum height .77 m; diameter at top .51 m, at bottom .36 m. In court of East Group. Column altar of typical design but for excessively rounded bottom.

San Felipe, near Pomuch

NAME

No Maya place-name known. Site takes its name from abandoned hacienda of San Felipe just south of the ruins.

SITUATION

Two km south-southwest of town of Pomuch, just west of railroad at Km. 133–134 marker.

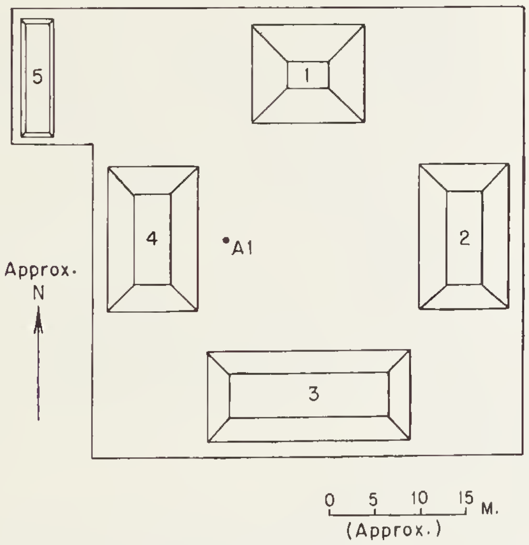


Figure 844. San Felipe. Sketch plan of ruins.

TOPOGRAPHY

Site located on flat western plain near foot of Puuc hills.

WATER SUPPLY

No natural water source identified but water table is only about 4 m below ground level and any small sink in limestone bedrock might have been exploited by ancient Maya. What appeared to be chultuns were observed but not explored and these may well have reached to permanent water and have been more in the nature of wells than chultuns. There are presumably a modern well at Hacienda San Felipe and numerous such wells in Pomuch.

MAP

Only map is sketch plan given here (fig. 844).

SIZE

Single small group of fallen buildings, none of which seems to have been large. Numerous low platforms (dwellings ?) scattered through bush around courtyard group.

CIVIC PLAN

Small courtyard group that does not seem to be part of a larger site. Primary orientation of group is probably toward the south.

Structure 1

Pyramidal mound about 5 m high. Well-cut and faced wall stone in debris but no obvious jamb stones or lintels, and no cut and faced vault stone. Structure may have employed small-stone construction for jambs and crude masonry vaulting (cf. Str. 4, below). A single carved stone (fig. 845a), seemingly facade decoration, was found fallen at the foot of the west slope of the mound.

Structures 2, 3

Mounds 2.5–3 m high. No obvious jamb stones or dressed vault stones found in debris of Structure 2. Semispecialized vault stone (fig. 845b), only dressed vault stone seen at San Felipe, in fall of Structure 3.

Structure 4

Building collapsed so that large parts remained intact, though fallen, thus preserving character of masonry. Wall stone moderately well cut, faced, and fitted. No large jamb stones visible and doorjambs probably made of small stone. Vaults built of rough overlapping slabs as in West Building of North Group at Xkastun (see fig. 847, below). Imprint in plaster of roof surface shows that roof comb was located over medial wall of building.

MONUMENT

Altar 1. Plain (fig. 845c). Height .38 m, diameter .36 m. In court before (east) Structure 4 (fig. 844). Straight-sided column altar.

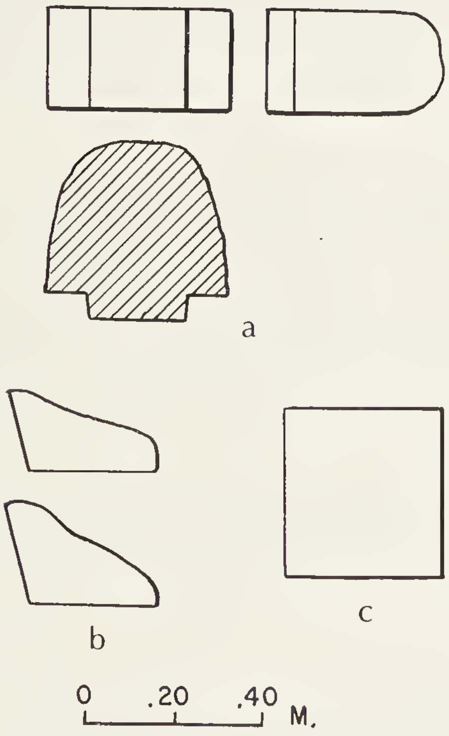


Figure 845. San Felipe, Structures 1 and 3 and altar: a, elevation, profile, and horizontal section of carved stone from Structure 1; b, profiles of vault stones from Structure 3; c, profile of Altar 1.

Xkastun

ETYMOLOGY

According to Roys (personal communication), probably means stone barrier, but could have other meanings. Variant spelling: Xcastun. This is probably the same site as Kaastun or Kastun (Muller 1960, p. 35).

SITUATION

Approximately 4 km southeast of Pomuch and 3 km south-southwest of Kanalku.

TOPOGRAPHY

My notes do not describe the terrain but I believe the site to be located near the crest of the hills behind (east) Pomuch.

WATER SUPPLY

No natural water source known but site only 2 or 3 km from western plain, where permanent water table is shallow (see San Felipe, above), and about same distance from Xkanalku aguada (see Kanalku, above). Several chultuns seen and undoubtedly more are present. Presumably modern well at abandoned hacienda of San Pablo about 2 km distant on road to Pomuch.

SIZE

Two courtyard groups about 100 m apart. Southern group contains some very large mounds.

CIVIC PLAN

Nothing notable other than court arrangement of each group.

NORTH GROUP

Number of fallen structures around a court with chultun near center. Fragment of building on east side of court is standing and shows well-cut, faced, and fitted wall stone and well-finished semispecialized vault stone. Only other masonry visible is in building on west side of court.

West Building

Badly fallen four-room building. Medial wall and northern transverse wall support fragments of vaulting.

SUPERSTRUCTURE

Plan. See figure 846.

Walls. Outer walls about .60 m thick, transverse walls .70 m, medial wall 1 m thick. Faced with moderately well-cut, dressed, and fitted stone.

Doorways. Jambs built of cornerstones and wall stone. Fallen stone lintel from doorway to west room.

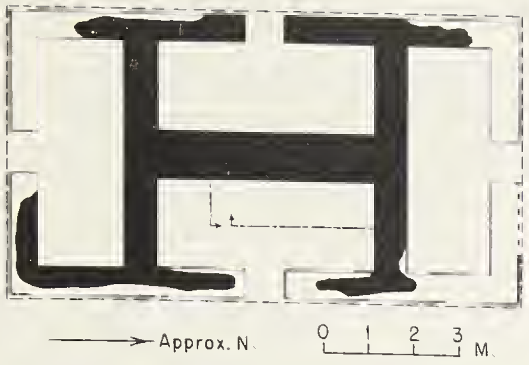


Figure 846. Xkastun, North Group. Plan of West Building.

Wall Openings. Rectangular window or ventilator in medial wall slightly below spring of vault and near each end of room (fig. 847b). Probably similar openings in now-fallen outer walls.

Vaults and Beams. Stepped vaulting of rough overlapping slabs, trimmed at exposed ends (fig. 847). Much chinking between slabs, which are tilted upward at exposed ends and weighted by large stones at buried ends. Vault at ends of rooms stepped inward in same manner as at sides (fig. 847b), and technique is very similar to that seen at Yakalmai (see p. 492, above).

Two large beams, one near each end of room, once spanned room at level of spring of vault (fig. 847b). Slightly smaller beam at center of room and high up in vault.

SOUTH GROUP

Group of very large mounds around a closed court about 100 m east-southeast of North Group. Buildings have been almost totally stripped of cut stone, presumably by people from Pomuch. Low square or rectangular platform near east side of court shows two or three steps made of well-cut and faced stone. Steps seem to be continuous on four sides of platform. Building on south side of court seems to have had columnar doorway employing three and possibly more columns. Each column made of two or more drums. Structure was vaulted.

MONUMENTS

Several monolithic altars were seen at Xkastun, one of which was recorded.

Altar 1. Plain (fig. 848). Height .50 m; diameter at top .80 m, at bottom .40 m. Found approximately 50 m northeast of South Group. Well-worked drum altar with sides that taper more sharply than normally.

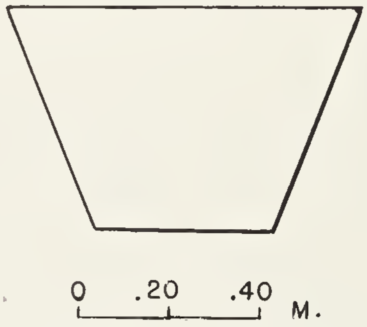
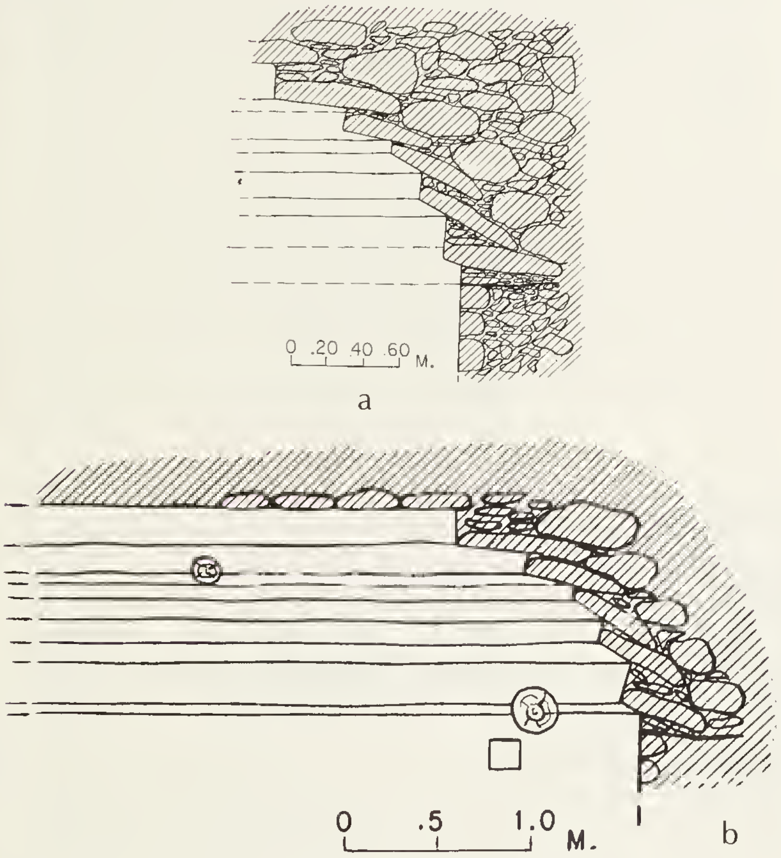


Figure 848. Xkastun. Profile of Altar 1.



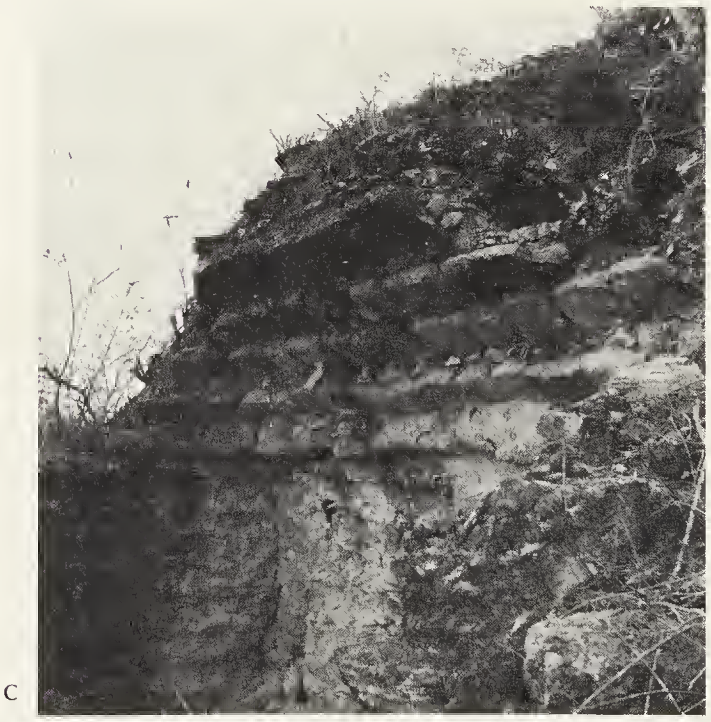


Figure 847. Xkastun, North Group, West Building, East Room. a, transverse section; b, longitudinal section; c, view from northeast, showing remains of walls and vault.

Xcocha

ETYMOLOGY

Meaning obscure. Our native workmen defined the word as a variety of tree, but Roys (personal communication) does not recognize the name (however, see Roys 1931, p. 225, *Xcoche,* as a possibility). Variant spelling: Xcochac. Other name: Las Palomas. This is undoubtedly the same site as Xeocho, which Muller (1960, p. 49) obtains from a misspelling on the Proskouriakoff (1950, fig. 111) map, and may be the same as Kocha (Muller 1960, p. 36).

SITUATION

About 12 km southeast of the town of Pomuch and the same distance east of Tenabo.

TOPOGRAPHY

Center of site on floor of savanna. Outlying buildings and groups of buildings on hills around savanna. Topography much like Xcalumkin (see p. 418).

WATER SUPPLY

Large aguada of Xcocha, from which the ruins take their name, lies approximately 1 km west-northwest of center of site. Aguada is about 40 m in diameter, is surrounded by an embankment of earth, and appears to be artificial. It is heavily silted and was dry when we viewed it (May 1940), but was probably large enough and deep enough to have held water throughout the dry season when clear of silt. Numerous chultuns were seen in the ruins. I do not know the nearest modern water supply but it may be at the hacienda of Chablé (or Chavi), perhaps 3–4 km southeast of Xcocha.

SIZE

Good-sized compact center of site is surrounded by outlying architectural groups—some of them quite large—that are located on hillsides and hilltops ranging from 200 m or less to over 500 m from center. Probably not as large as Xcalumkin but large relative to ruins seen by us in this region of Campeche.

CIVIC PLAN

Center of site consists of pyramid surrounded by tightly clustered courtyards on savanna floor. Spreading out from center are buildings and groups of buildings on nearby hills. Plan is much like Xcalumkin (see p. 419).

REFERENCES

Marquina et al. (1939, p. 20), Ruz (1945, p. 52), and Muller (1960, p. 48) cite an unpublished description of Xcochac by Escalona Ramos that I have not seen.

CENTRAL OR MAIN GROUP

As previously explained, what seems to be the central part of the site is a complex of buildings, all fallen, located on the floor of the savanna or, more probably, on low rocky outcroppings (cf. Xcalumkin, p. 418). Near the center of the group, and its most prominent feature, is a pyramid about 8 m high. The building that once crowned the pyramid is fallen but probably faced west, on which side, at the foot of the structure, is a sculptured stone drum (see Miscellaneous Sculpture, below) and an altar (see Monuments, below) in a small closed court with fallen buildings on the north, south, and west sides. South of the pyramid is another court, in the southeast corner of which is a fallen building where we found a sculptured column in the debris. The column, which is 1.52 m in height and .49 m in diameter, is carved with a dancing human figure in low relief (fig. 849; and see Proskouriakoff 1950, fig. 99e, and p. 166, called Valley Group). It seems to have been the only column in a doorway in the east wall of the building, whereas the west wall had a doorway of two plain columns. Both doorways employed full-width jamb stones, and a well-worked specialized vault stone was seen in the debris. Elsewhere in the Main Group we observed both full-width jamb stones and doorjambs built of small stone, large doorway columns, typical monolithic altars, and chultuns.

Approximately 60 m north of the pyramid in the Main Group we found on the floor of the savanna a sculptured stone of unknown function or association (see Miscellaneous Sculpture, below), and about the same distance south of the pyramid a sculptured altar (see Monuments, below).

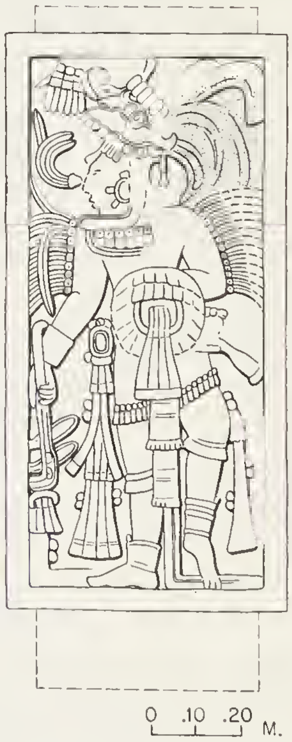


Figure 849. Xcocha, Central Group. Sculptured doorway column from court south of pyramid. Sculptured panel is shown laid flat.

Building of the Glyphic Band

Some 250 m north-northeast of the pyramid in the Main Group, the best-preserved building at Xcocha stands on top of a low hill. I have no record of any associated structures, if such there were, nor any description of the court or terrace upon which the building rests, but there is a photograph (fig. 850) of a terrace wall that shows the customary rough substructural wall masonry.

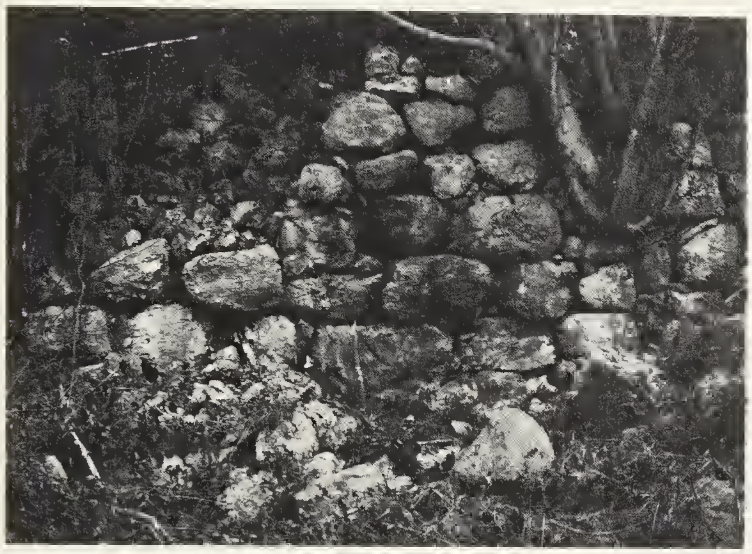


Figure 850. Xcocha, Building of the Glyphic Band. Masonry of terrace wall.

The building consists of three parts (fig. 851), an east wing (Rooms 1–4), a west wing (Rooms 5–7), and between these a solid block of masonry, presumably to support a second story. Rising above the roofs of the East and West Wings to a height of about 2 m are the faced stone walls of the second-story platform, and building debris or fill goes up another meter. There may be the remains of a stairway against the front (south) of this platform, but that is not certain. The East Wing, which was built first and once was a separate building, has the vaults of Rooms 2 and 4 and a portion of the vault of Room 1 intact; the vault of Room 3 is totally collapsed. In the West Wing Rooms 6 and 7 are standing, and a small portion of the vault of Room 5 remains, but the front wall is fallen and buried beneath debris. Nothing remains of a second story but the basal platform.

SUPERSTRUCTURE

EAST WING (Rooms 1–4)

Plan. See figure 851.

Section. See figure 852. Incomplete.

Base Molding. Single course of dressed stone .28 m high and projecting .04 m from wall above preserved at west end of wing (fig. 852).

Floor. Usual construction of rough unshaped stone laid dry, topped by small rough stone, also laid dry, and finally capped by a layer of pure lime mortar or plaster (fig. 852).

Walls. Outer walls .55–.60 m thick, transverse walls .62 m at doorjambs, medial wall .85 m thick. Wall stone moderately well cut, faced, and fitted with some use of spalls between stones.

Doorways. Outer doorway of two sculptured columns, sculptured capitals, and very probably sculptured corbels on jambs (see Decoration, below) although none was recovered (fig. 853). Jambs built of cornerstones and small stones between (fig. 852). Stone lintels over inner doorways; no lintels from outer doorway found.

Wall Depressions and Projections. Cordholders of tongue-at-corner-of-stone variety (fig. 854b), two at each side of doorway in Room 2 and Room 4. Rod sockets about .05 m in diameter and .025 m deep (fig. 852) in jambs of same doorways. Broken cordholder in form of human foot in north side of vault of Room 1 (fig. 852).

Bench. Deep bench at east end of Room 2 (fig. 851). Built contemporaneously with floor of room (fig. 854c).

Vaults and Beams. Moderately well-cut, faced, and fitted, only slightly specialized vault stone (figs. 852, 855). Sides of vaults show very little curve. Hieroglyphic inscription on first course of north soffit of vault in Room 1 (see Decoration, below).

Rooms 1 and 2 had two beams just below spring of vault and two near top of vault. Room 4 had three beams

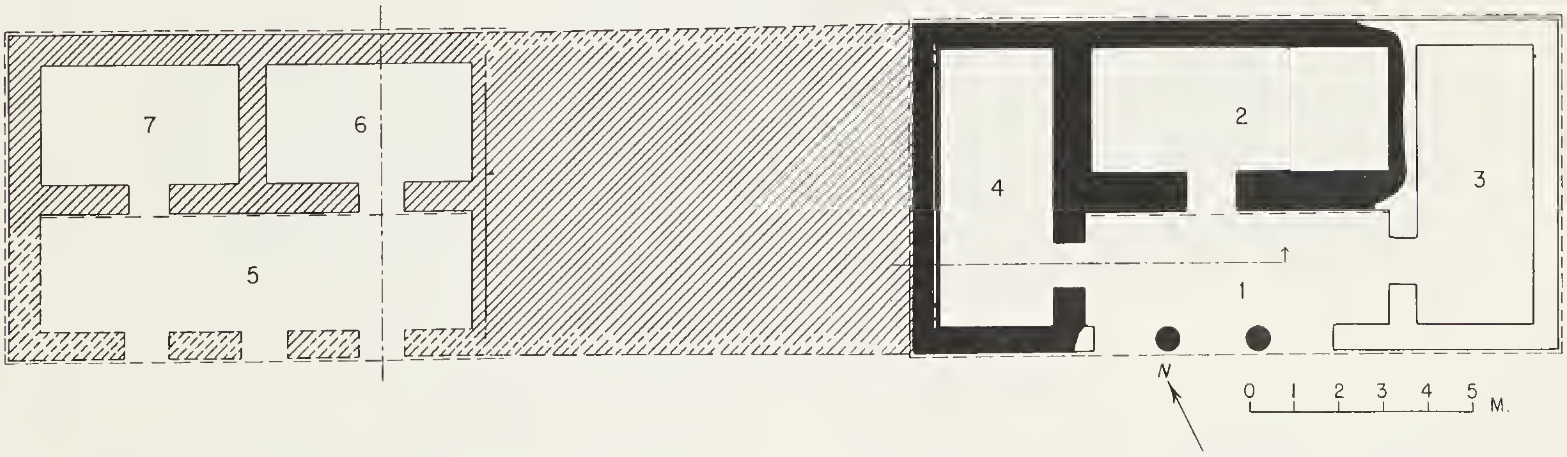


Figure 851. Xcocha. Plan of Building of the Glyphic Band.

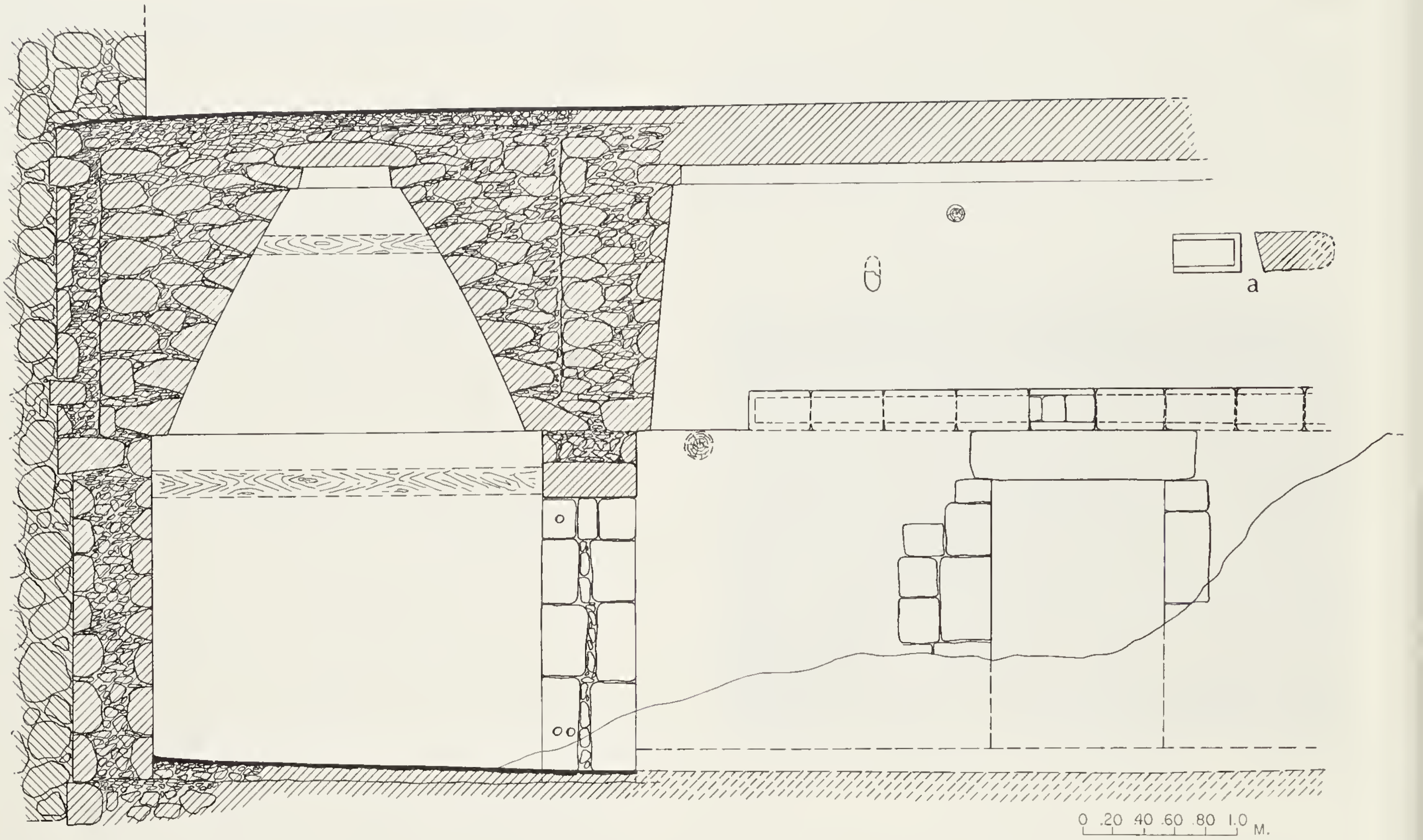


Figure 852. Xcocha, Building of the Glyphic Band, East Wing. Section through Room 4 and part of Room 1 (carving omitted, see fig. 857): a, detail of last stone from glyphic band (see fig. 857c).

one course below spring, and two at three-quarters height of vault (fig. 852).

Moldings. Simple rectangular medial and cornice moldings, typical of the region, are preserved by masonry of second-story substructure which was built secondarily against west facade of east wing (fig. 852).

Roof. Preserved at places (fig. 852). Construction typical of Puuc building.

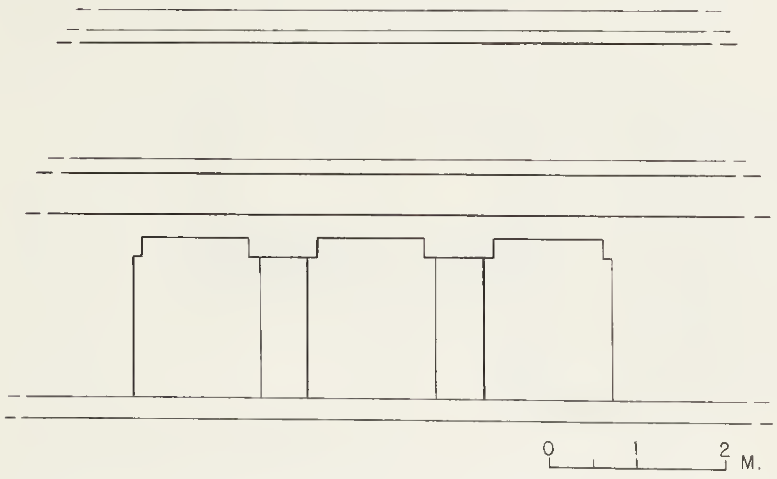


Figure 853. Xcocha, Building of the Glyphic Band, East Wing. Elevation of entrance (sculpture omitted, see fig. 856).

Roof Structure. Remnant of roof comb 1.26 m thick over medial wall and continuing over Room 4. Presumably once ran length of building (i.e., East Wing). Faced with cut and dressed wall stone (fig. 854a). Do not know if of perforated variety or not.

Decoration. Columns and capitals in outer doorway are sculptured. West column shows elaborately dressed human figure and small captive figure in front of principal figure, all carved in low relief (fig. 856a; and see Proskouriakoff 1950, fig. 100a; and Pavon 1942, p. 63). Column is 1.58 m high and .53 m in diameter at top. East column deeply buried and not excavated. East capital carved with glyphs on front and sides (fig. 856b; and ibid.) but capital does not belong with column shown. West capital not excavated. May have been sculptured corbels on jambs of this doorway but none found. See Proskouriakoff 1950, p. 167 for discussion of sculpture on column.

Glyphic band that formed slightly recessed panel in spring course of vault of Room 1. Only one stone, apparently near center of panel, still in position, but band seems to have been centered over doorway to Room 2 (fig. 852). Stone (fig. 857b) measures .26 m high and .42 m wide. First or westernmost stone in inscription (fig. 857a) found

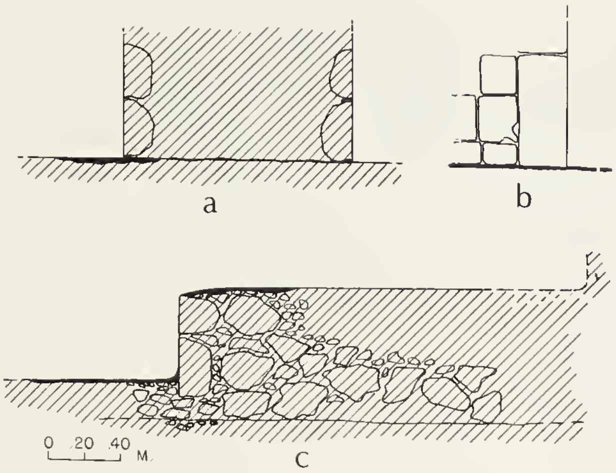


Figure 854. Xcocha, Building of the Glyphic Band, East Wing: a, section of remnant of roof comb; b, cordholder inside north jamb of doorway to Room 4; c, section of bench in Room 2.

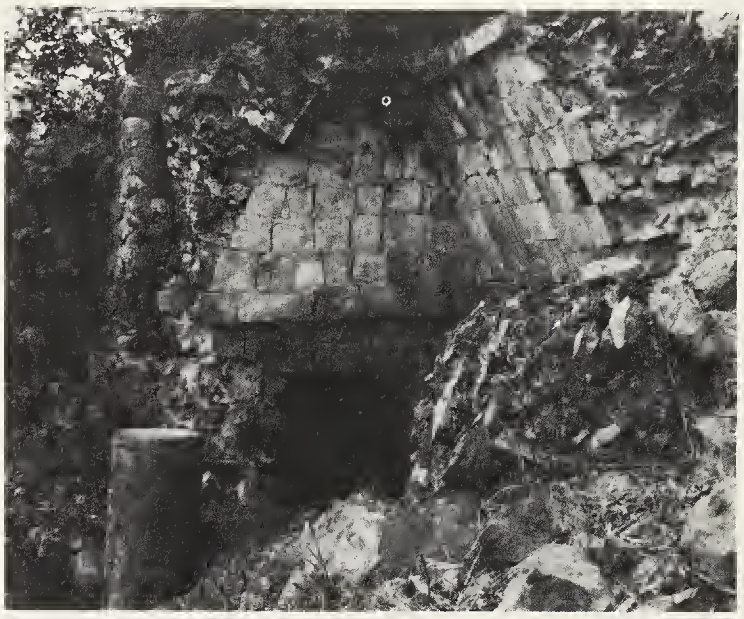


Figure 855. Xcocha, Building of the Glyphic Band, East Wing Room 1, looking northwest, and showing western doorway column, doorway to Room 4, and vault masonry.

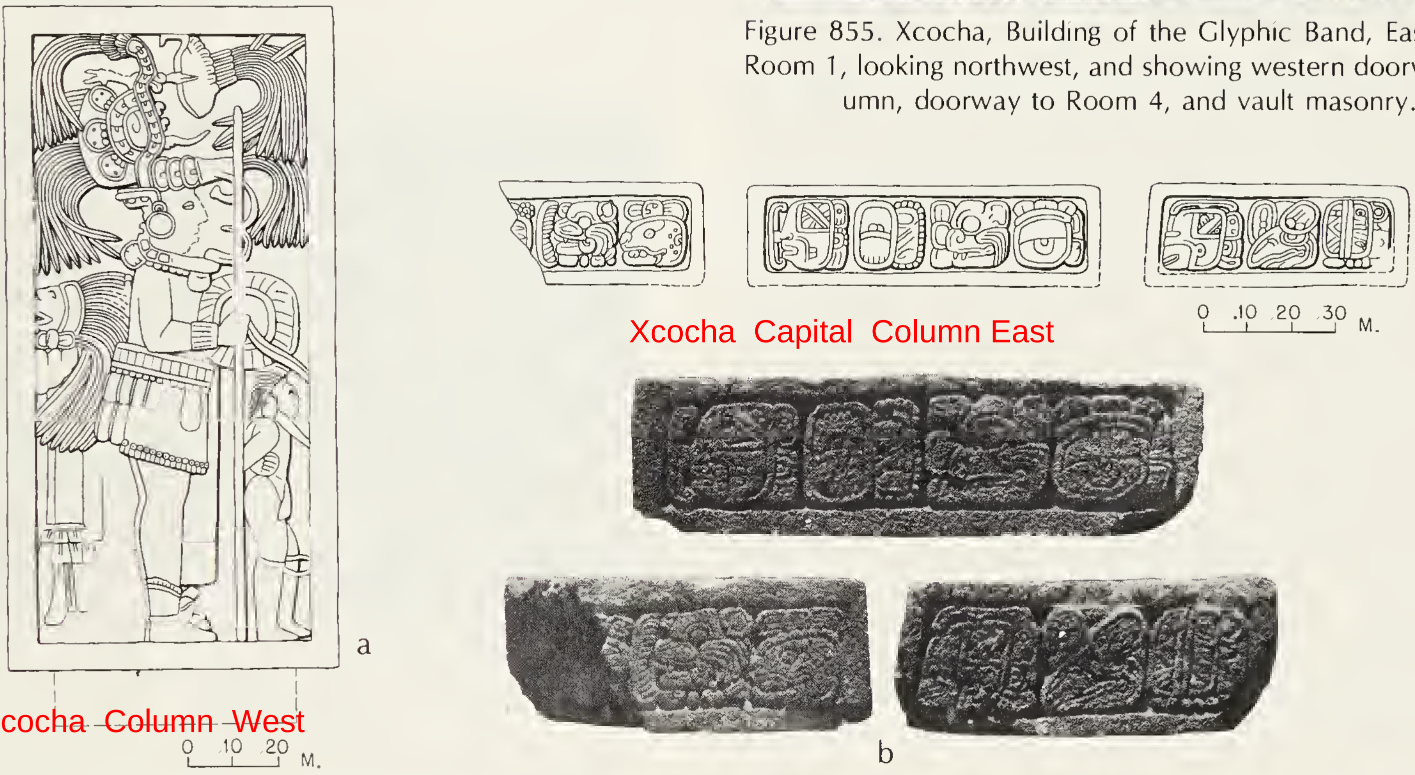


Figure 856. Xcocha, Building of the Glyphic Band, East Wing entrance: a, sculpture on west column; carved panel laid flat; b, inscription on front and sides of capital from east column.

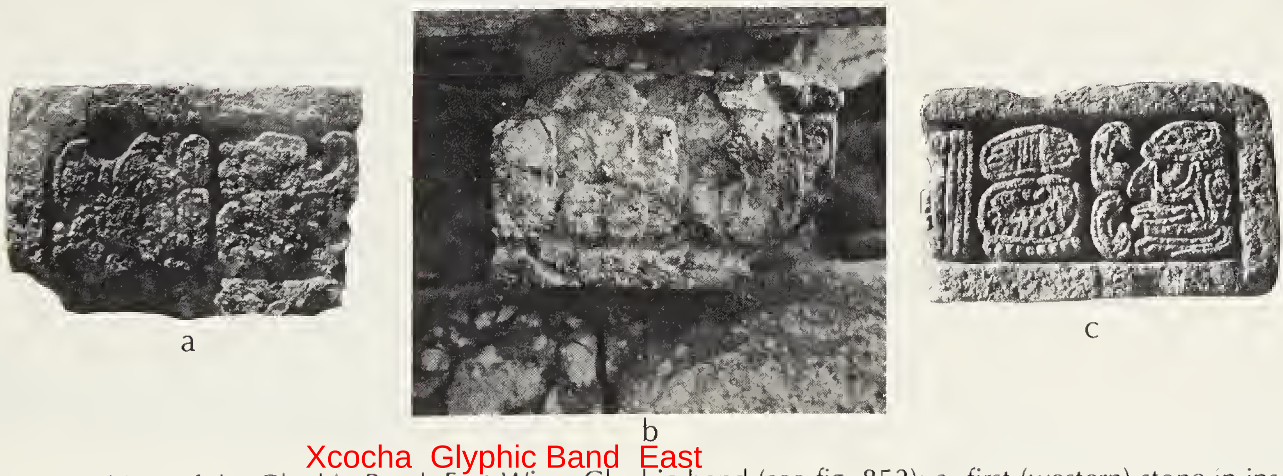


Figure 857. Xcocha, Building of the Glyphic Band, East Wing, Glyphic band (see fig. 852): a, first (western) stone in inscription, now fallen; b, only stone *in situ*, near middle of inscription; c, last (eastern) stone, now in museum in Campeche.

in debris of vault. Measures .26m high and .40 m wide. Last or easternmost stone (fig. 857c) in private house in Pomuch at time of our visit (1940) and since removed to Archaeological, Ethnological, and Historical Museum in Campeche. Stone measures .26 m high and .44 m wide (fig. 852a). Our laborers reported that five other stones from this inscription were lying in Room 1 the previous year but had since disappeared.

The western facade of the East Wing, protected by secondary construction, retained its original plaster finish which was painted red.

WEST WING (Rooms 5–7)

Plan. See figure 851.

Section. See figure 858.

Construction. Exterior walls .64 m thick, transverse wall approx. .60 m thick, medial wall .60–.64 m. Wall facing like that of East Wing but of somewhat better quality (fig. 859). Doorways in medial wall have jambs built of cornerstones and carry stone lintels. Front wall of structure totally fallen but no large jamb stones or columns seen in debris, and best guess is three entrances of same construction as those in medial wall. Cordholders like those in east wing. Vaulting also like that of East Wing but of somewhat better quality (fig. 859). Only first course of medial molding, a rectangular member (fig. 858), still in position. Roof comb over medial wall is thinner (.80 m) and faced with better cut and dressed stone than roof comb on East Wing.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

East Wing (Rooms 1–4) once stood as independent building. To west end of East Wing was added solid block of masonry, presumably the substructure for a second-story building and the West Wing (fig. 851), these two constructions being contemporary. No trace of a second-story superstructure is visible and it may never have been built.

Building of the Decorated Base

Approximately 75 m northwest of the Building of the Glyphic Band and 300 m or a bit less north of the Main Group are the remnants of a badly destroyed structure on a low hill. As with the Building of the Glyphic Band, I have no record of any associated structures and do not know if the building is part of a small group of structures or if it stands alone. The building has been badly gutted by a treasure hunter from Pomuch (fig. 860) but was mostly fallen even before his depredations. Our knowledge of the structure comes to considerable extent from fallen elements.

SUPERSTRUCTURE

Plan. Not clear. May have been a one-room building facing south.

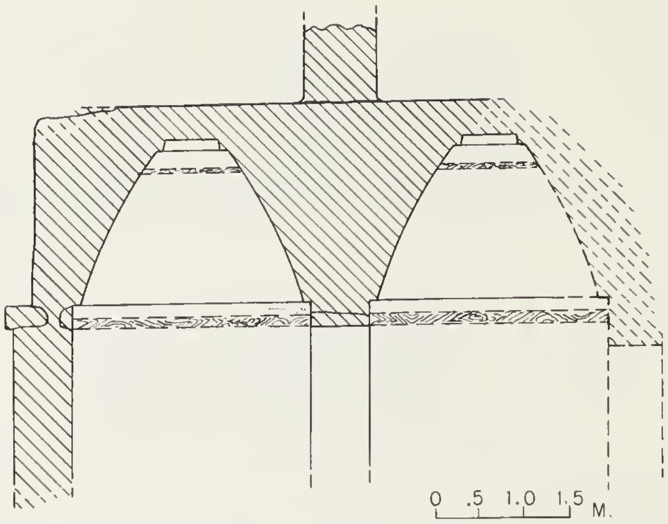


Figure 858. Xcocha, Building of the Glyphic Band, West Wing. Section through Rooms 5 and 6.

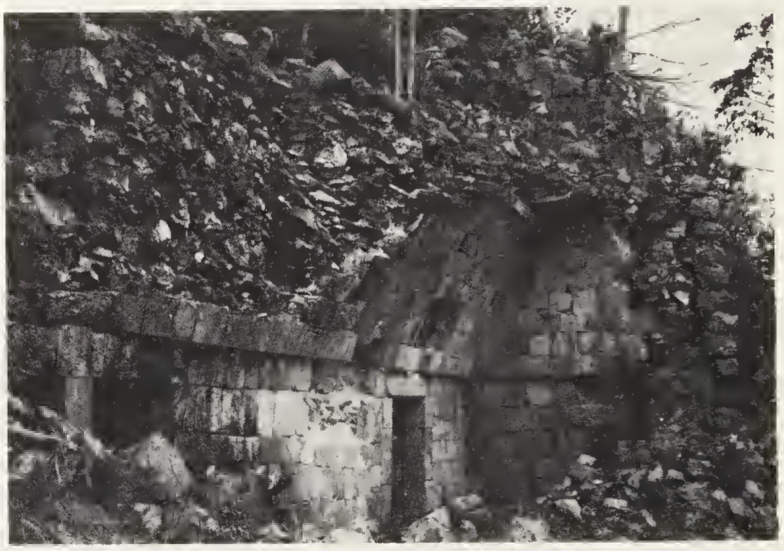


Figure 859. Xcocha, Building of the Glyphic Band, West Wing. Room 5, looking east, and showing doorways to Rooms 6 and 7, and wall and vault masonry.

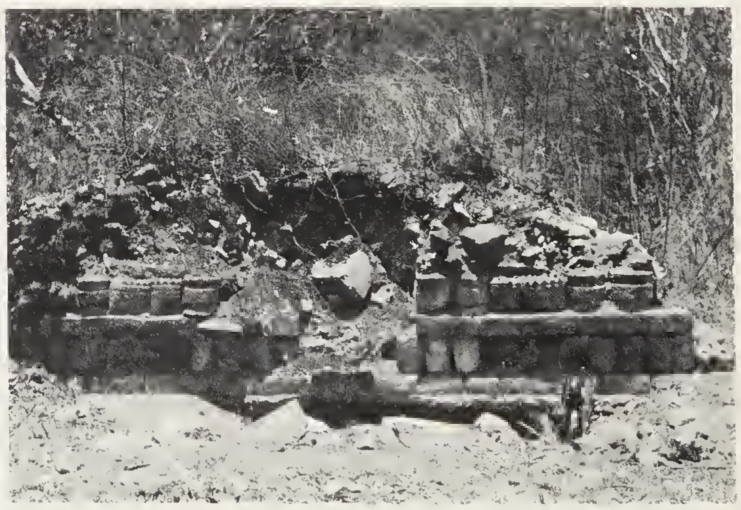


Figure 860. Xcocha, Building of the Decorated Base. View from south.

Base Molding. Heavy three-member molding of top and bottom rectangular members and decorated middle member (fig. 861). Stone well cut, faced, and fitted.

Walls. No measure of wall thickness. Well-cut, faced, and fitted stone.

Doorway. Full-width, well-finished jamb stones. Presumably a stone lintel.

Vaults. None standing. Well-cut and faced vault stone, somewhat specialized.

Moldings. None standing. Either medial or cornice molding, or both, seems to have employed linked circle design (fig. 862, top left; and cf. figs. 697, 930) on one member.

Decoration. Lower facade zone decorated with pairs of banded split columns separated by other geometric designs of which only a dentate element remains in position (fig. 861). Other elements found fallen in the debris of the building are shown in figure 862. Still other pieces (fig. 861a) that very probably are from this building were seen in Pomuch. Some of this decoration presumably came from upper facade.

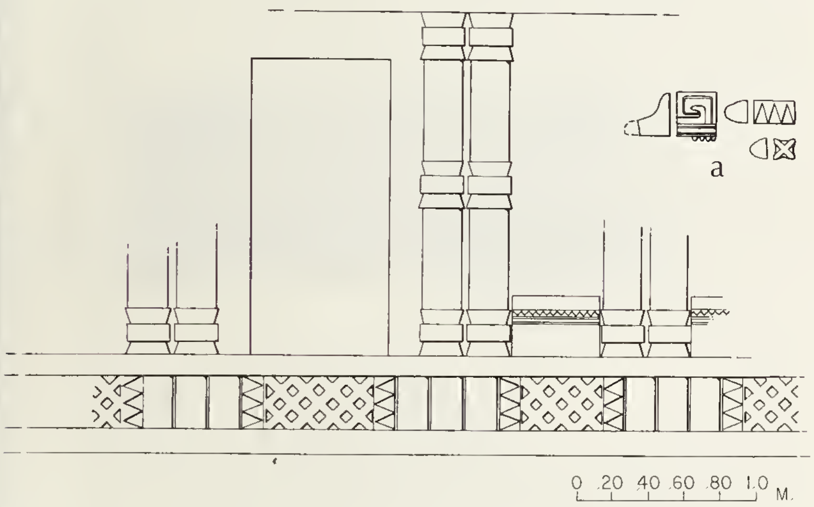


Figure 861. Xcocha, Building of the Decorated Base. Restored elevation of portion of south facade: a, elements of decoration presumably from this building.

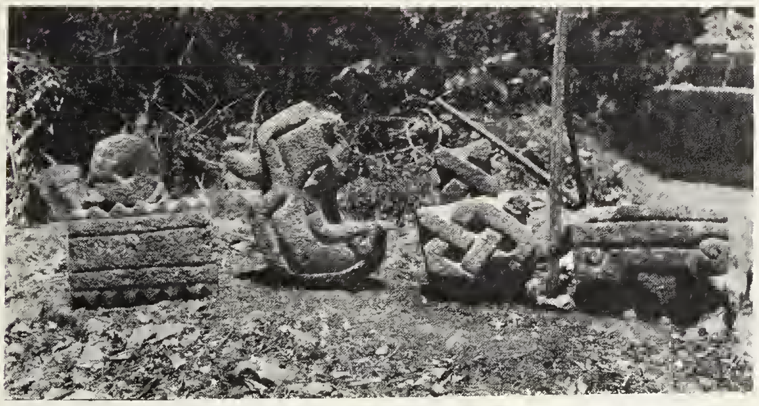


Figure 862. Xcocha, Building of the Decorated Base. Fallen elements of decoration from building debris.

NORTHEAST GROUPS

Three groups of structures on small hills northeast of the Building of the Glyphic Band were seen and cursorily examined. The nearest group, about 150 m from the Building of the Glyphic Band and some 400 m from the Main Group, contains several mounds and a building with one complete room and parts of other rooms standing. The wall masonry, the small stone jambs, and the vaulting is like that in the East Wing of the Building of the Glyphic Band (see p. 509, above).

Another group 75–100 m further northeast and about 500 m from the Main Group consists of a large court with mounds on all sides and several chultuns in the courtyard. Large full-width jamb stones were observed in the debris of the south building.

A third group about 300 m northeast of the Building of the Glyphic Band and something over 500 m from the Main Group comprises another court with mostly fallen structures around it. In a mound on the north side of the court, some wall masonry of well-cut, faced, and fitted stone is visible, as well as the remains of a doorway with two columns and small stone jambs. The south building on this court has one room and the fragment of another standing. The wall masonry is of moderately well-cut, faced, and fitted stone; the vaulting is of the same quality as the wall masonry, the stone showing some specialization. The fragment of a roof comb about .75 m thick is of interest in being located over the rear soffit of the vault of a front room, rather than over the medial wall as is customary.

Several monolithic altars were seen in these three groups.

SOUTHEAST GROUP

A good-sized assemblage of structures is situated on a high hill about 200 m south-southeast of the Main Group. At least two courts surrounded by mostly fallen buildings were seen. Near the northeast corner of the eastern court a partly standing structure showed well-cut, faced, and fitted wall stone, large full-width jamb stones, a sculptured column, sculptured capital, and well-cut and finished semispecialized vault stone. The sculptured column, which was found fallen on the north side of the building, measures 1.54 m in height by .50 m in diameter at the top. The much weathered bas-relief carving (fig. 863a; and see Proskouriakoff 1950, fig. 99d) depicts a dancing figure strikingly like that seen on the sculptured column in the Main Group (for discussion see p. 508, above; and ibid., p. 166). The capital, which is .20 m high, .80 m wide, and .54 m deep, has on the front four glyphs too weathered to merit photographing. Near the column was a broken sculptured stone (fig. 863b) that suggests a roof crest, a type of roof ornament more commonly associated with the Toltec-Maya architecture of Chichen Itza (e.g., see Ruppert

1935, fig. 246) than the Puuc remains (but see Xcucsuc, South Group, West Court, West Building, p. 488, above, and Kanalku, M1, p. 504, above).

Elsewhere in this hilltop group we observed fragments of standing wall of well-cut, faced, and fitted stone, well-cut, full-width jamb stones, and many columns from doorways. Most of the columnar entrances seem to have employed a pair of columns, but there were single-column doorways, and possibly one with three columns. The only molding (medial) seen was of two rectangular members, normal in this region.

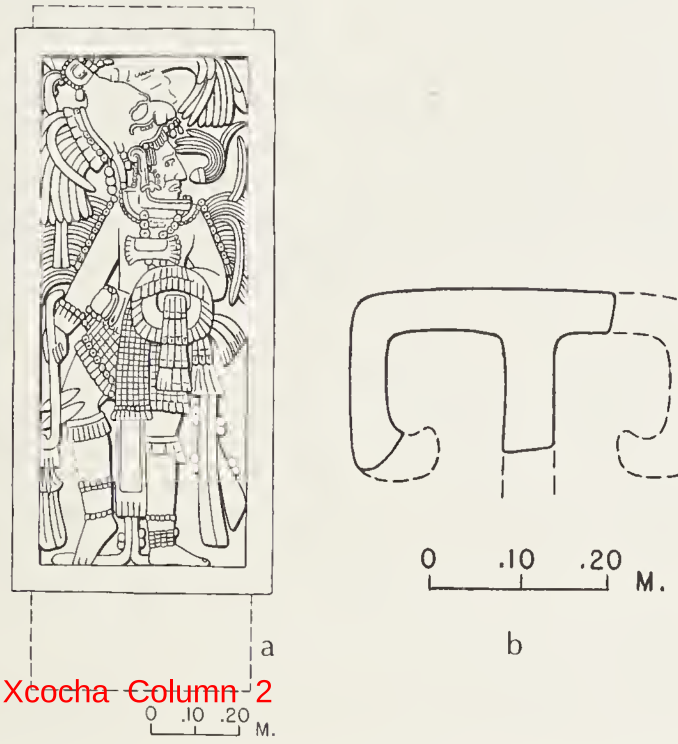


Figure 863. Xcocha, Southeast Group, East Court: a, sculptured doorway column; carved panel laid flat; b, carved stone, possibly a roof crest.

SOUTHWEST GROUP

A large hill about 175 m southwest of the pyramid in the Main Group supports a number of buildings arranged around courts or terraces on three levels in a generally east-west line. The western and highest court has structures on three sides, those on the east and south completely fallen, that on the north with one room standing. The masonry of the north building is like that of the East Wing of the Building of the Glyphic Band (see p. 509, above).

East of the court described above and at a somewhat lower level is another court surrounded by badly fallen buildings. In the debris of one of these we found seven stones carved with hieroglyphs and a sculptured lintel. The glyphic stones seem to have formed vertical bands (fig. 864a) and most probably are from doorjambs. The lintel, which has a maximum length of 1.20 m and maximum height of .29 m, carries the badly weathered, low-relief carving of the head, arms, and shoulders of a warrior on the front edge (fig. 864b).

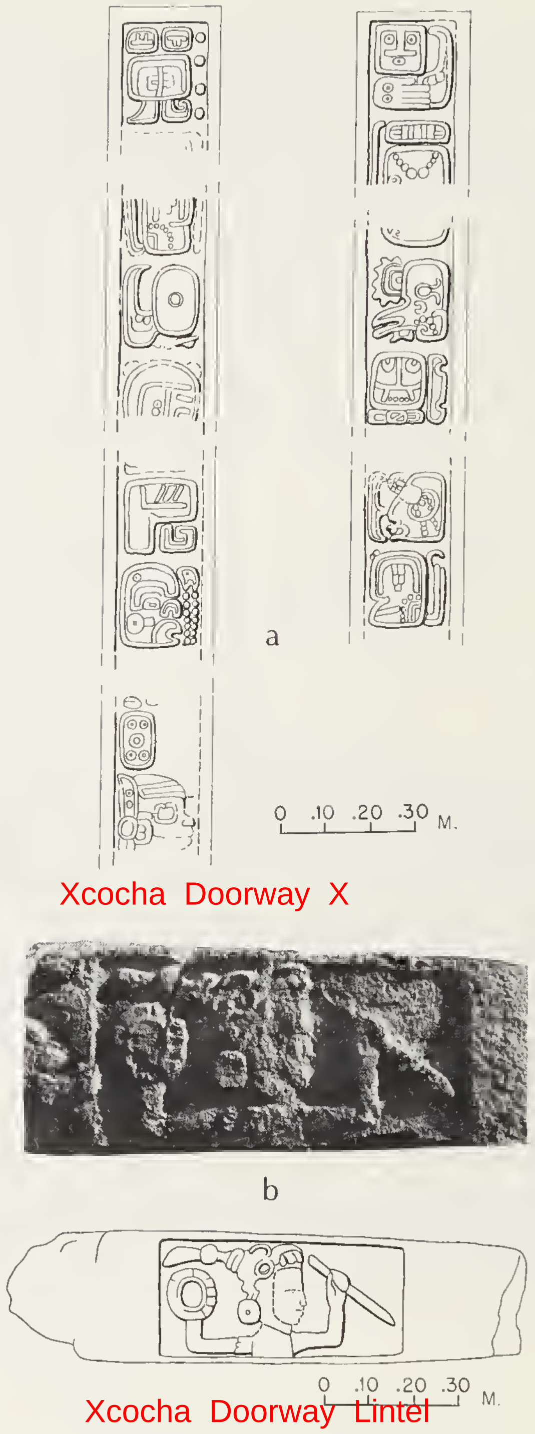


Figure 864. Xcocha, Southwest Group, Middle Court: a, glyphic inscription on stones found in debris of building; photographs of these stones, the sequence of which is in question, are on file at Peabody Museum, Harvard University (40–9–221–226, 229); b, carving on front of fallen lintel.

The lowest and most eastern court has on its southern edge a fallen building that probably once held three rooms in line facing north. An occasional piece of standing wall shows the masonry to have been of beautifully cut, faced, and fitted stone comparable to that in the Temple at Xcalumkin (see p. 450, above). A badly weathered stone sculpture lay in the court before this building (see M3, below).

MISCELLANEOUS SCULPTURE

M1. Carved stone drum of unknown use (fig. 865a). Carving in low relief and very weathered. Height .30 m, diameter .44 m. Found in court at foot (west) of pyramid in Main Group. Next Altar 1 (see below).

M2. Sculptured stone of unknown association (fig. 865b). Height .33 m, width .38 m, thickness .18 m. Found in savanna about 60 m north of pyramid in Main Group.

M3. Carved stone of unknown function (fig. 865c). Badly weathered. Maximum height .54 m. Found in debris before (north) building on lowest and most eastern court in Southwest Group.

MONUMENTS

ALTARS

A number of the common monolithic altars were observed at Xcocha, two of which were recorded.

Altar 1. Plain (fig. 866a). Height 1.61 m; diameter at top .70 m, at bottom approx. .63 m. Lying in court at foot (west) of pyramid in Main Group. Next to Sculpture M1 (see above). Large column altar. The sides of the upper half are parallel, of the lower half converge slightly and with slight curve.

Altar 2. Carved (fig. 866b). Height .97 m, width at top .50 m, thickness at top .42 m. In court about 60 m south of pyramid in Main Group. Considerably weathered rectangular altar with three-member molding on all sides.

Xtampak, near Tenabo

Since there is at least one other ruin site by the name of Xtampak or Tampak, I am identifying the present site as near Tenabo, a town on the Campeche-Merida railroad.

ETYMOLOGY

tampak or *xtampak* = in front of the wall (see Pollock 1970, p. 46). Variant spelling: Xtanpak. This may be the site of Hobomo (Muller 1960, p. 33) or Homobo (Marquina et al. 1939, p. 16; Muller ibid.) since the ruins are in the savanna of Hobomo. Marquina et al., followed by Muller, seem to have confused the village of Hobomo south of the city of Campeche and east of Seybaplaya with the ruins in the region of Pomuch and to have transposed the third and fifth letters of the name.

SITUATION

Approximately 10 km east-southeast of the town of Tenabo, 5 km southwest of Xcocha, 5 km north-northwest of Kanki hacienda, and 4–5 km northwest of Kanki ruins (Main Group).

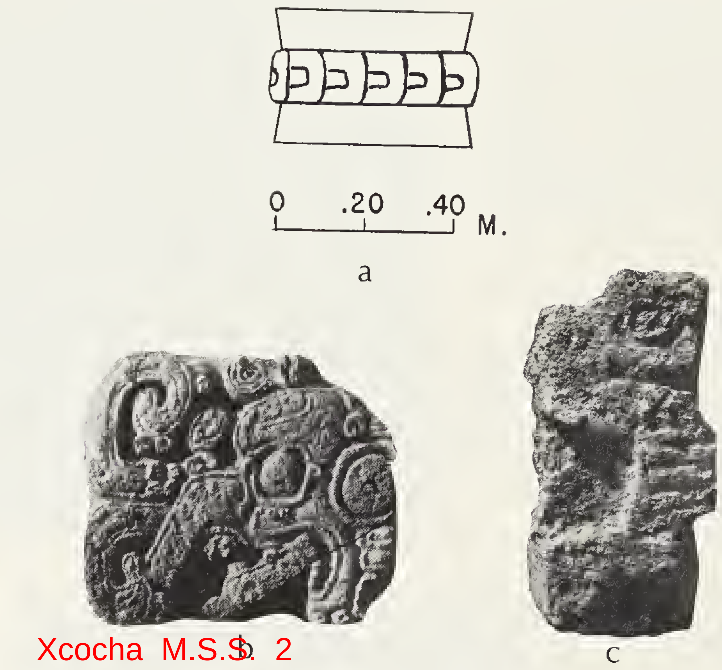


Figure 865. Xcocha. Miscellaneous sculpture: a, M1, stone drum; b, M2, mask and scrolls; c, M3, carved stone of unknown function.

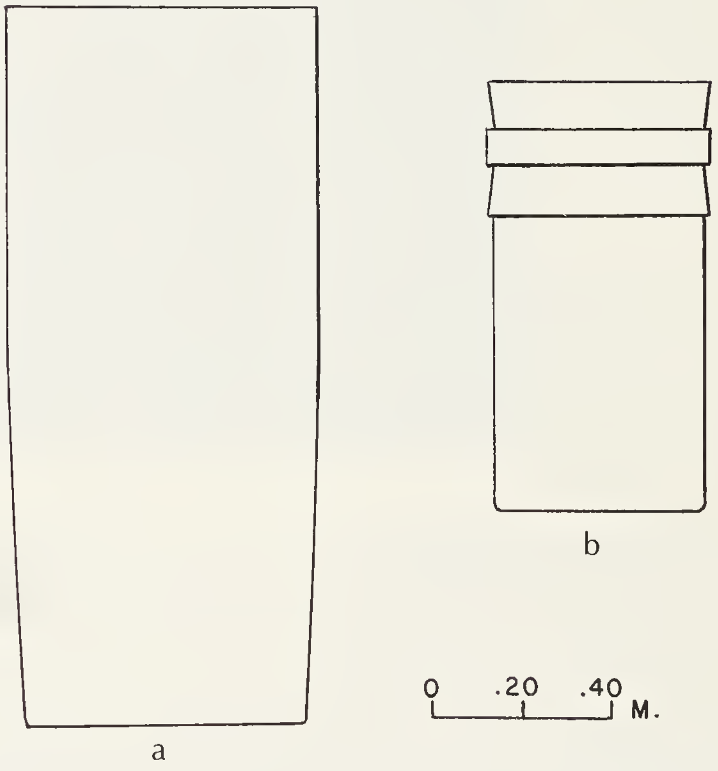


Figure 866. Xcocha. Altars 1 and 2. a, Altar 1; b, Altar 2.

TOPOGRAPHY

What seems to be center of site is located on low hills on edge of savanna of Hobomo. Other construction on floor of savanna and on surrounding hills.

WATER SUPPLY

No local natural water supply known to us. Xcocha aguada (see p. 508, above) 5 km to northeast; Kanki aguada (see p. 523, below) 5 km to southeast. Usual number of chultuns observed. Modern well at Hacienda Kanki, 5 km to south-southeast, and presumably at San Roque, not far distant to south-southwest, and at Chablé (or Chavi) to east, but I have not visited the last two places.

SIZE

Number of small groups of buildings thinly spread over good-sized area. Difficult to judge whether all groups belong to one site, but total amount of construction not great in any case. Best thought of as small site.

CIVIC PLAN

Nothing distinctive. Usual courtyard arrangements of buildings on hills and on valley floor. Dispersed pattern of building remains is noteworthy.

MAIN GROUP

Hilltop group of buildings on three sides of court, the south side being open, and ranges of rooms at lower level at south and west sides. Only visible masonry of lower ranges is small vault on west side that runs east into foundations under court. Some of wall and vault stones of this buried chamber are well cut and faced, but fitting of stone is sloppy and masonry has crude appearance.

North Building

Best preserved structure at Xtampak. Three rooms in line facing south on court. West room nearly intact and most of rear (north) wall of building is standing.

SUPERSTRUCTURE

Plan. See figure 867a.

Section. See figure 867b.

Base Molding. Single course of dressed stone offset .05 m from wall (fig. 867b).

Walls. Front and end walls .60 m thick, rear wall .55 m thick, interior transverse walls .70 m.

Exterior facing fairly well cut, faced, and fitted below medial molding (fig. 868a); facing of upper facade less well finished (fig. 868b). Interior facing somewhat rougher than that of upper facade (fig. 868c).

Doorways. Jambs built of cornerstones with small stone between (fig. 867b). Stone lintels.

Wall Projections. Cordholders of ring variety in rear wall (fig. 867b), one near each end of room. Rough tenon projecting from south facade near west corner of building indicates stucco decoration.

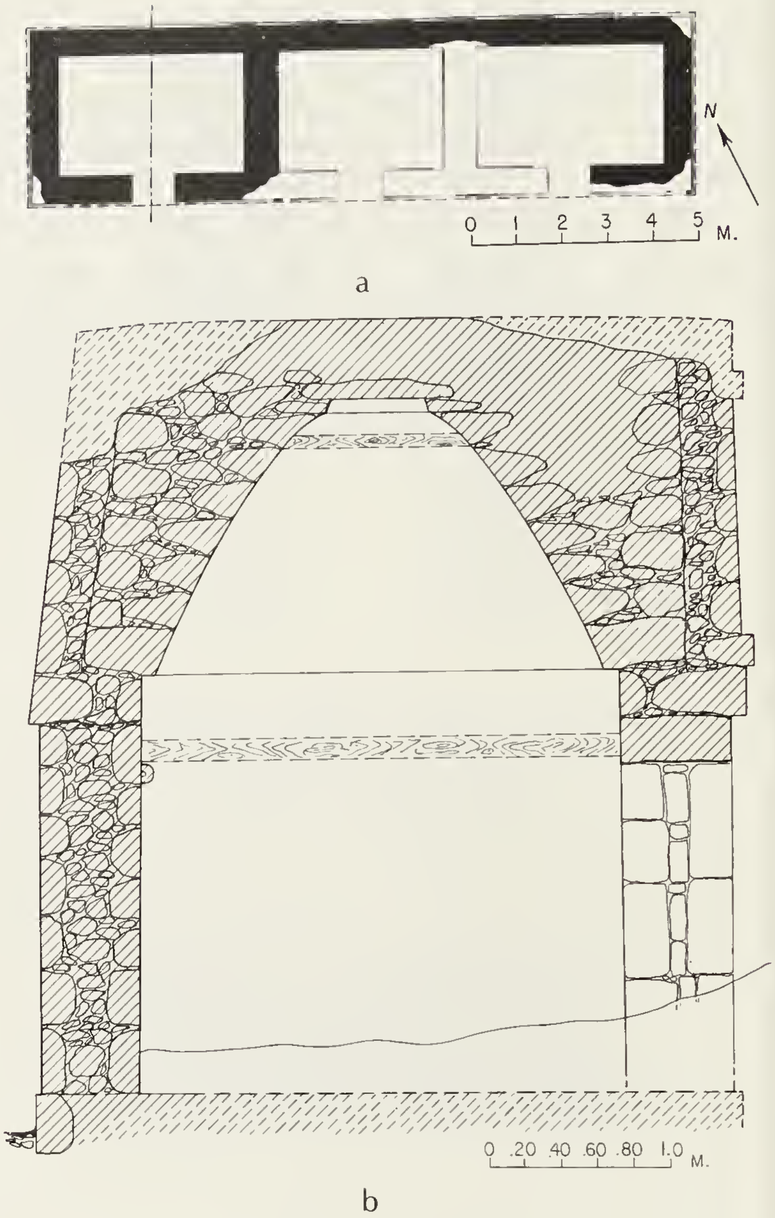


Figure 867. Xtampak, Main Group, North Building: a, plan; b, north-south section through west room.

Vaults and Beams. Vault stone moderately well cut, faced, and fitted (fig. 868c) and only slightly specialized (fig. 867b). Sockets for two large beams, one near each end of room, at level of door lintels, and for three smaller beams, one at each end of room, one at center, in course below corbels under capstones.

Moldings. Medial molding of two rectangular members across main (south) facade (figs. 867b, 868b). At ends and rear of building upper facade rises on batter from projecting course at level of medial molding and thus forms great apron member. No cornice molding remaining but very probably of two rectangular members (fig. 867b).

Decoration. Single projecting tenon remaining in upper zone of south facade indicates that at least front of structure carried decoration, presumably of stucco.

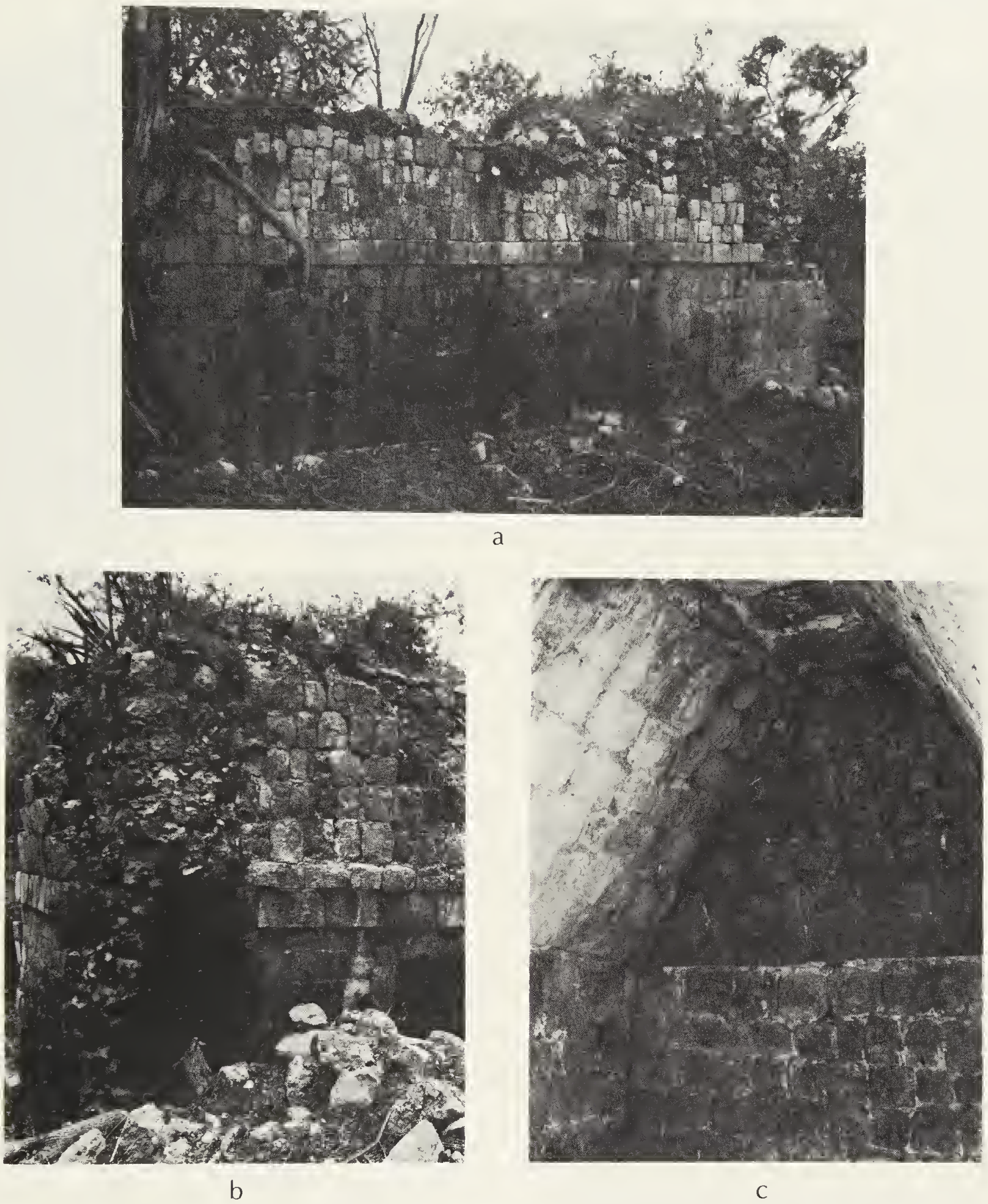


Figure 868. Xtampak, Main Group, North Building: a, rear wall, looking southwest; b, southwest corner, looking northeast, and showing west end wall, doorway to west room, and medial molding; c, interior of west room, looking east.

East and West Buildings

Both of these badly fallen structures face on the court. The East Building carries a three-member base molding, the middle member of colonnettes (fig. 869), and finely cut, dressed, and fitted exterior wall facing. The interior wall facing is well finished but not so fine as the exterior. Doorjambs are made of large full-width stones.

The base molding of the West Building is deeply buried. Wall masonry, both exterior and interior facing, is comparable to that in the North Building. There are the remains of a doorway that employed a single column with rectangular capital and full-width jamb stones topped by corbels. The lintels were of stone. Only the first course of the medial molding, a rectangular member .26 m high, is in place. In front of the building lay the small sculpture M1 (see Miscellaneous Sculpture, below).

Building in Savanna

About 100 m south of the Main Group and on the floor of the savanna is a platform with the remains of a once-vaulted building that faced east. The structure consisted of three rooms in line, the center room entered by a doorway

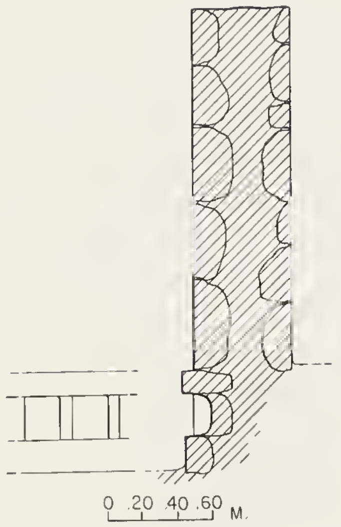


Figure 869. Xtampak. Main Group, East Building. Elevation and section of base molding and section of wall.

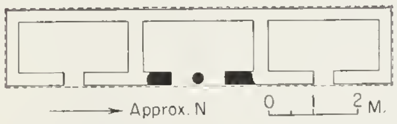


Figure 870. Xtampak. Sketch plan of Building in Savanna.

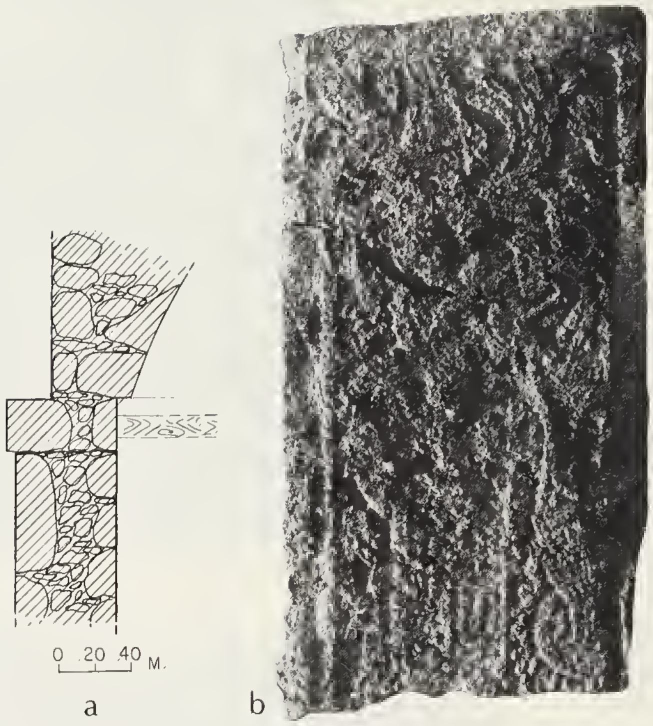


Figure 871. Xtampak, Northwest Group, North Building: a, detail of wall and vault masonry; b, fragment of sculptured doorjamb.

with a single central column (fig. 870). Wall stone is well cut, faced, and fitted. Doorjambs employ full-width (.59 m) stones; door column is .57 m in diameter.

NORTHWEST GROUP

Possibly 300 m northwest of the Main Group is a court with buildings on three sides located on a hilltop. Like the Main Group, the south side of the court was open. All of the structures are fallen, but enough remains of the North Building to show that the exterior wall facing was of large, finely-cut and fitted stone, and the interior facing of moderately well-cut and fitted stone of normal size (fig. 871a). Doorjambs were large, full-width stones, and seem to have been sculptured in at least one doorway. Vault stones were well cut and tended to be specialized in shape (fig. 871a). Only the first course of the medial molding, a heavy (.30 m) rectangular member, is preserved. In the building debris we found the upper part of a sculptured doorjamb (fig. 871b) measuring 1.04 m long (on center), .56 m wide, and with a maximum thickness of .34 m. The shallow carving is much weathered, but I believe it may be in the style of, and depict the same subject as, the sculptured column in the East Wing of the Building of the Glyphic Band at Xcocha (see p. 510, above).

The building on the east side of the court probably consisted of two rooms in line and is mainly of interest in that it seems to have faced east, its back wall toward the court. The West Building is totally collapsed.

MISCELLANEOUS NOTES

No altars were observed at Xtampak but some may well have been missed.

Several small ruins at distances up to 1 km from the Main Group, and that might or might not be thought of as parts of Xtampak, were visited or seen at a distance. The distances that follow are approximations.

Hilltop ruin 800 m to north. Not visited.

Ruins on high hill 1 km to northeast. Group of pyramidal mound on south side of court and low platform mounds on east and west sides. Few building stones seen were well cut and faced. Chultuns in court.

Hilltop ruin 500 m to southwest. Not visited.

Small cluster of platforms and one partly standing vaulted building 400 m to west. Well-cut, faced, and fitted wall stone. Chultuns.

MISCELLANEOUS SCULPTURE

M1. Squatting anthropomorphic figure with hands on knees and face peering from jaws of animal (fig. 872). Sculpture in full round and in fair state of preservation except for face which is badly weathered if not mutilated. Maximum height .61 m, maximum width (at feet) .25 m, maximum depth .30 m. Found in court in front (east) of West Building in Main Group.

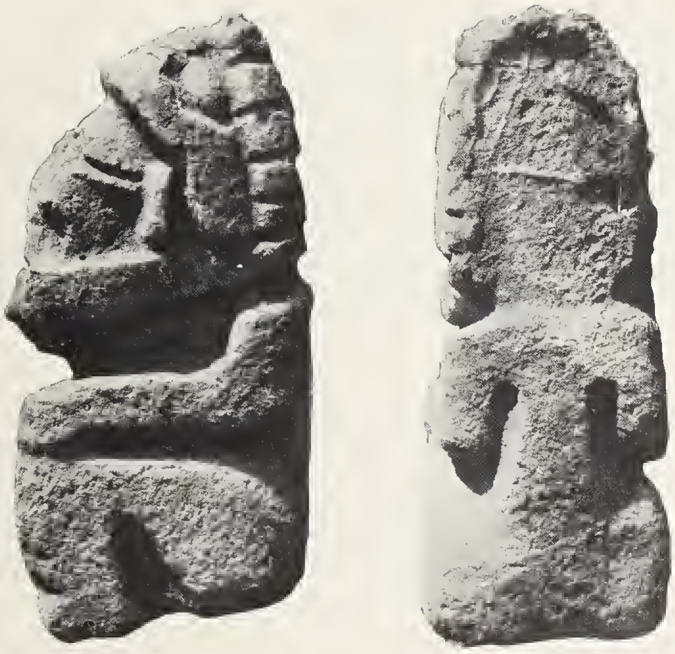


Figure 872. Xtampak. Miscellaneous sculpture, M1, anthropomorphic figure of stone.

Bolonchoch

ETYMOLOGY

Roys (personal communication) says *bolon* = nine or figuratively, many, and that *bolonchoch* could mean many entrails, or *bolonch'och'* mean very salty. Variant spelling: Bolonchoh.

SITUATION

About 4 km north-northeast of Kanki hacienda, 3 km in same direction from Kanki ruins (Main Group), and 4–5 km south of Xcocha.

TOPOGRAPHY

Several small groups of structures on hilltop just west of savanna of Bolonchoch, from which the ruins take their name.

WATER SUPPLY

No nearby natural water known. Kanki aguada (see p. 523, below) 3–4 km to the south; Xcocha aguada (see p. 508, above) 4–5 km to the north. Several chultuns observed. Nearest modern well at hacienda of Kanki or possibly at Chablé (or Chavi) to east.

SIZE

Small site of several little hilltop groups, only one of which was examined.

CIVIC PLAN

None apparent. Usual arrangement of structures about court and some hillside terracing, but site too small to apply the term "civic plan."

MAIN GROUP

What seems to be the most important group, and the only one closely examined, is a court with buildings on all four sides that rests on a hill sloping off sharply to the northeast, east, and southeast. Aside from the platform that supports the group, there is some hillside terracing, notably a circular platform that forms the drainage area of a chultun. There are also chultuns in the court.

The north, east, and two west buildings on the court are almost totally fallen. The northern structure had been a range of rooms facing south on the court. In the debris were well-cut and faced wall stone, full-width (.47 m) jamb stones, and semispecialized to specialized vault stones. The eastern building, which also had faced on the court, showed less well-finished wall and vault stone in the debris, and probably but not certainly had employed doorjambs built of small stone. In the particularly badly fallen northern of the two structures on the west side of the court, specialized vault stones were visible in the debris. The southern of the two buildings exhibits wall and vault masonry like that in the structure on the north side of the court, a columnar outer doorway, and an inner doorway with small stone jambs.

South Building

Best-preserved building on the court, there being parts of two vaults standing (fig. 873a), originally consisted of two rooms that faced north on the court, to which was later added another construction, now badly fallen, against the southern or rear wall. The following notes deal entirely with the northern rooms as little could be seen of the plan or other details of the secondary addition.

SUPERSTRUCTURE

Plan. Two rooms on east-west axis and facing north on court.

Construction. Wall facing of moderately well-cut, dressed, and fitted stone of normal size, that on the exterior of the building being of better quality than on the interior. Doorjambs built of cornerstones. Small rectangular windows or ventilators in rear (south) and end walls (fig. 873b), and very probably in front wall of building. Vault stone semispecialized. Beam sockets at each end of room in course below spring of vault and sockets for single beam at center of room in course below corbels under capstones (fig. 873b). Two-member medial molding, each member carrying very slight batter, and cornice molding of two rectangular members. Exceptionally thin roof cap, only .26 m from underside capstones to upper surface (fig. 873b). Remains of roof comb over rear (south) wall.

Decoration. Fragment of stucco decoration, apparently from north facade, found in debris in front of building.

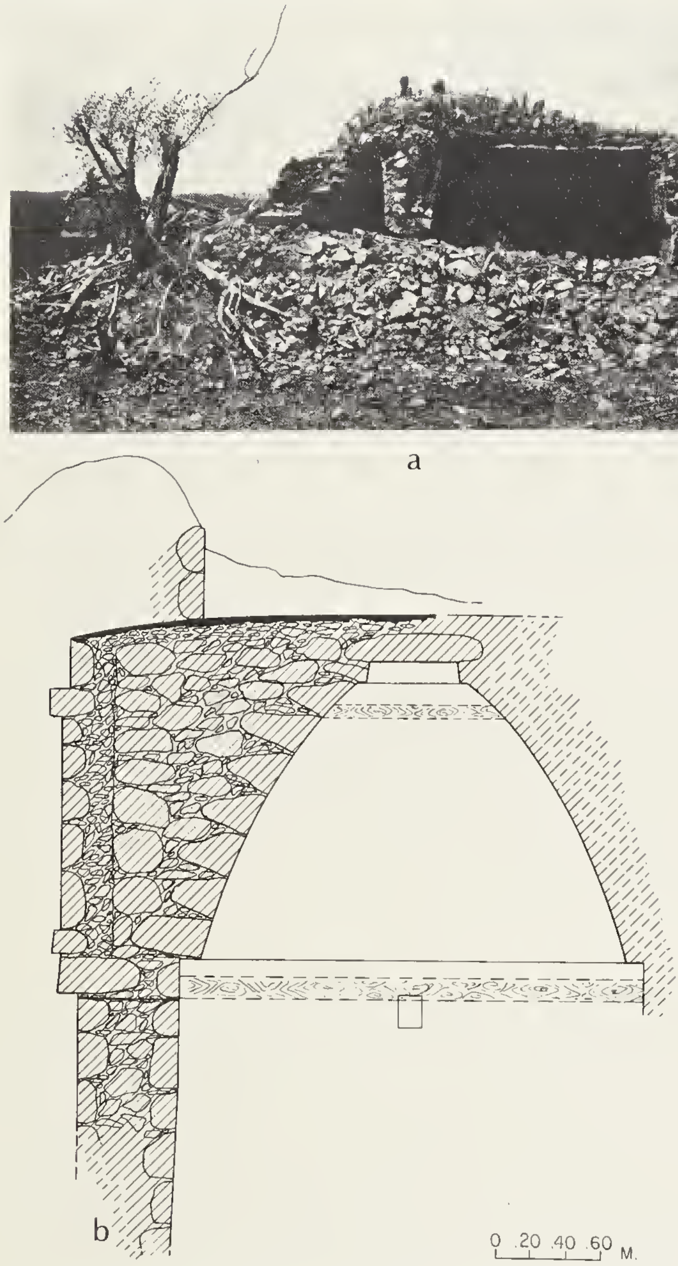


Figure 873. Bolonchoch, Main Group, South Building: a, view from north; b, transverse section through west room.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Secondary addition of rooms, now badly fallen, built against south wall of original building, thus preserving rear facade to full height (fig. 873b). What can be seen of masonry of addition shows no difference from that of original structure. Roof comb probably added at time of secondary construction, when old rear wall of building became a medial wall, but this sequence is not certain.

MISCELLANEOUS NOTES

No altars were seen at Bolonchoch but they may well have been hidden beneath debris.

Our guide pointed out several hilltop ruins that we did not visit. One lay about 1 km to the northeast across the savanna of Bolonchoch. Another was less than 1 km to the north. A third was possibly 3 km northwest and evidently near Xtampak.

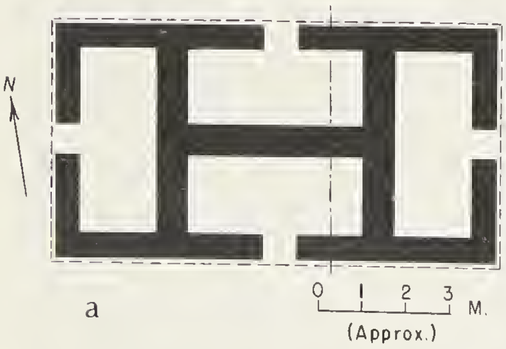
Xcorralcot

ETYMOLOGY

According to Roys (personal communication), *corral* = corral; *cot* = dry-stone wall; i.e., corral of dry stone.

SITUATION

Approximately 2.5 km south of Xtampak, 2–2.5 km west-northwest of Kanki ruins (Main Group), and 2.5–3 km northwest of Kanki hacienda.



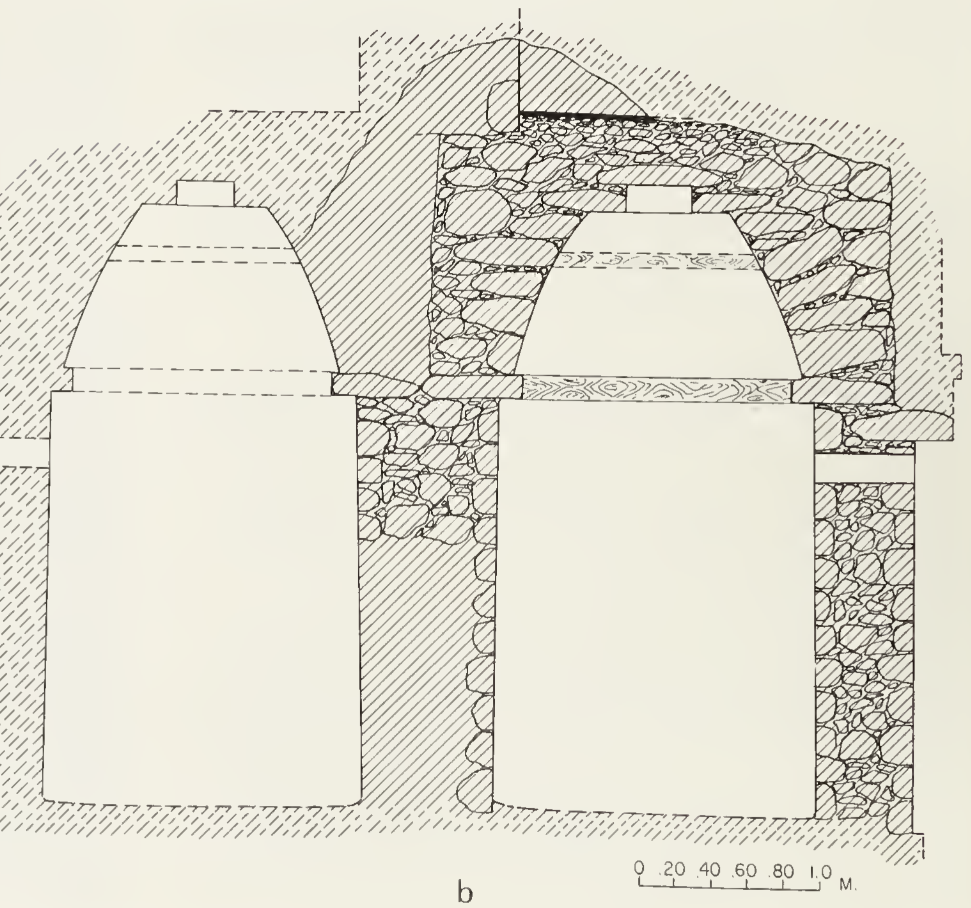


Figure 874. Xcorralcot, East Group, Central Building: a, sketch plan; b, north-south section through central rooms.

TOPOGRAPHY

Hilltop ruins just west of large savanna of Kanki which can be seen from East Group.

WATER SUPPLY

No nearby natural water supply known. Kanki aguada (see p. 523, below) 2.5 km to southeast. Chultuns present. Nearest modern well at Kanki hacienda.

SIZE

Two small groups of buildings 400–500 m apart.

CIVIC PLAN

Usual arrangement of buildings on courts but site too small to suggest any larger plan.

EAST GROUP

Small hilltop group of five structures on a court. All buildings but one, which is centrally located in the group, are totally fallen. Well-cut and faced wall stone and semispecialized vault stone were seen in debris of fallen structures.

Central Building

This four-room building has one vault (south room) standing and considerable part of another room (northern) standing and visible. Rooms are narrower (1.78 m) than usual.

SUPERSTRUCTURE

Plan. See figure 874a. Sketch plan.
Section. See figure 874b.

Base Molding. Probably single projecting course of faced stone but not excavated.

Walls. Outer walls .55 m thick, medial wall .75 m. Facing of moderately well-cut, dressed, and fitted stone that is smaller than normal. Outer facing (fig. 875) somewhat better than interior (figs. 876, 877b).

Doorways. Jambs built of cornerstones and wall stone. Stone lintels (fig. 876a).

Wall Openings and Depressions. Two small rectangular windows or ventilators (figs. 874b, 875) in south wall of south room just below medial molding, and probably similar openings in outer walls of all rooms. Two-hole variety of cordholders (fig. 876b) on inner wall face at each side of south doorway.

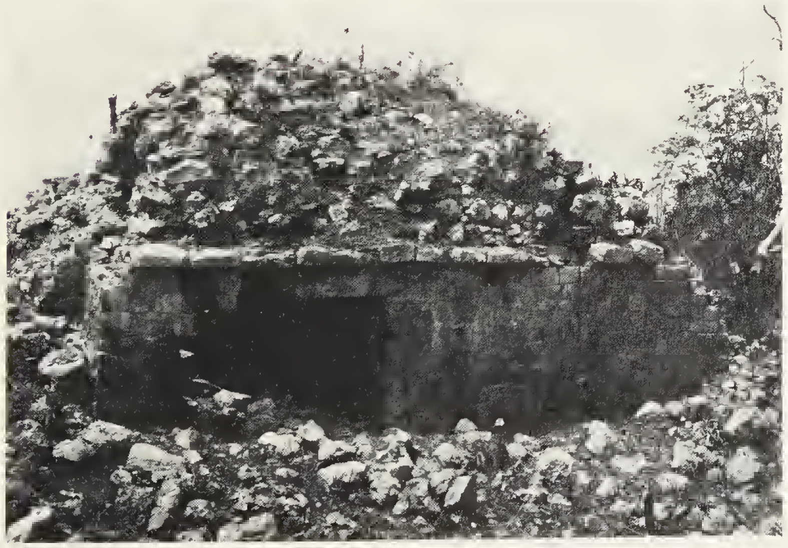
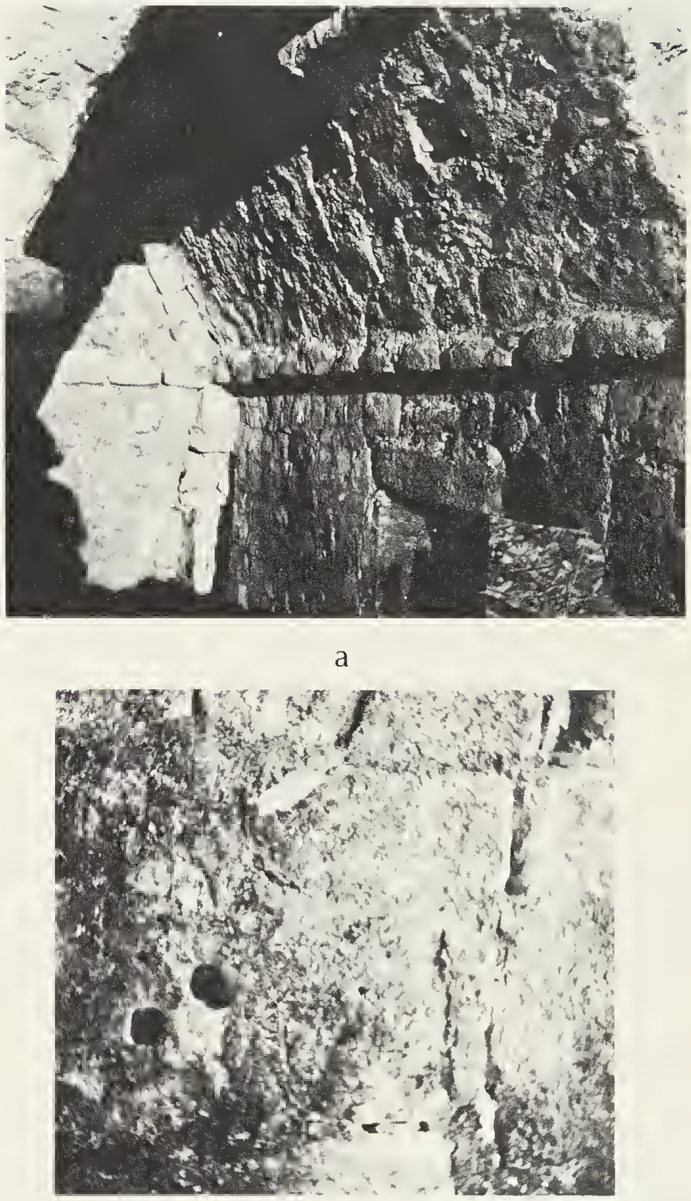


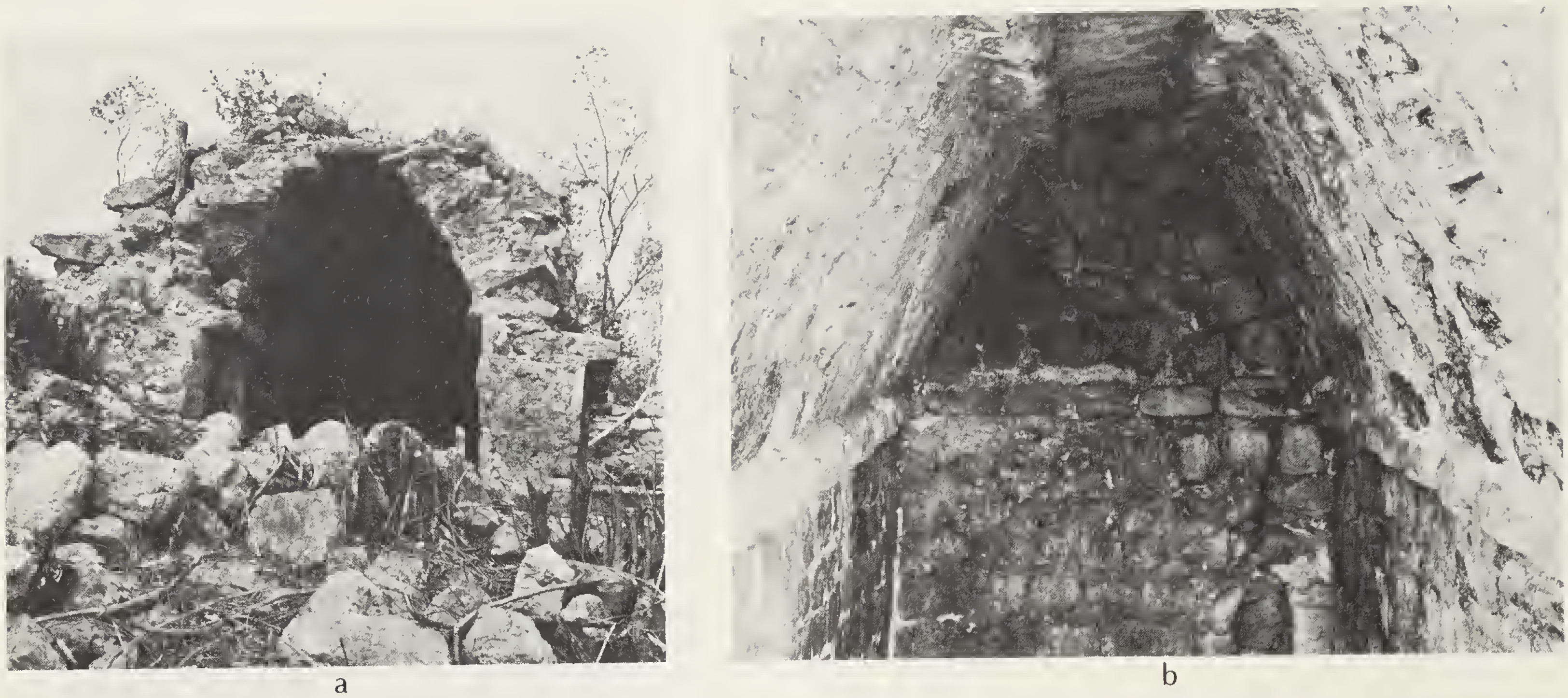
Figure 875. Xcorralcot, East Group, Central Building. View from south, showing doorway to south central room.



a

b

Figure 876. Xcorralcot, East Group, Central Building, south central room: a, view from northwest, showing wall and vault masonry, projecting spring course of vault, and south doorway; b, cordholder at left of south doorway.



a

b

Figure 877. Xcorralcot, East Group, Central Building, south central room, looking east: a, walls and vault in section; b, interior wall and vault masonry.

Vaults and Beams. Rather low vaults built of thick rough slablike stone squared off at exposed ends but not dressed (figs. 874b, 876a, 877). Spring course projects beyond soffit, as seen at Xkalachetzimin (see p. 497), a rare feature. Corbels under capstones carry more overhang than is usual. Sockets for two beams, one near each end of room, in spring course, and for two beams at three-quarters height of vault (fig. 874b).

Moldings. Only lowest course, apparently part of rectangular member, remains in place (figs. 874b, 875).

Roof. Normal roof cap .38–.40 m thick from under face of capstones to upper surface of roof.

Roof Structure. Fragment of footing of roof comb that once stood over medial wall of building (fig. 874b).

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Structure seems to have been built in sections, as shown by vertical lines of cleavage in wall masonry (figs. 875, 877a), but close inspection indicates that building represents single period of construction.

WEST GROUP

Hilltop group 400–500 m west of East Group and at lower level. Terrace holds three structures (fig. 878), the northern completely fallen, the other two partly standing. Two chultuns were seen and there may be more.

Middle building has very narrow transverse vault over tiny chamber at east end of central room (fig. 878). Both exterior and interior wall masonry of finely cut, faced, and fitted stone. Doorjambs built of full-width stones and supported large well-cut stone lintels. Specialized vault stone, finely cut and finished.

South building shows well-cut, faced, and fitted wall stone. Outer doorways have jambs built of full-width stones; jambs of inner doorways made of small stone. Well-finished specialized vault stone. We did not determine whether front (north) rooms might be secondary to rear rooms.

Chultun Platform

About 150 m southeast of the West Group is a circular, or more nearly semicircular, hillside terrace with the mouth of a chultun near its center. The rough stone retaining wall (fig. 879) stands about 2 m high on the downhill side, from where it curves around in each direction and merges with the slope of the hill on the uphill side of the terrace. The

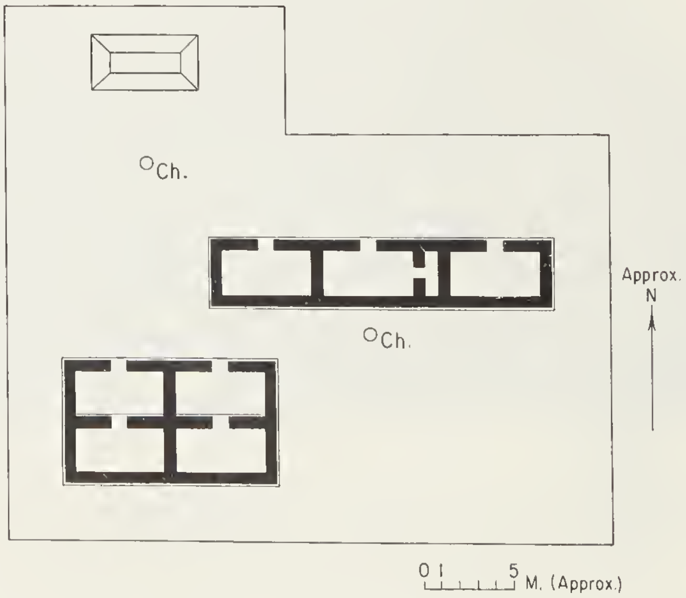


Figure 878. Xcorralcot. Sketch plan of West Group.

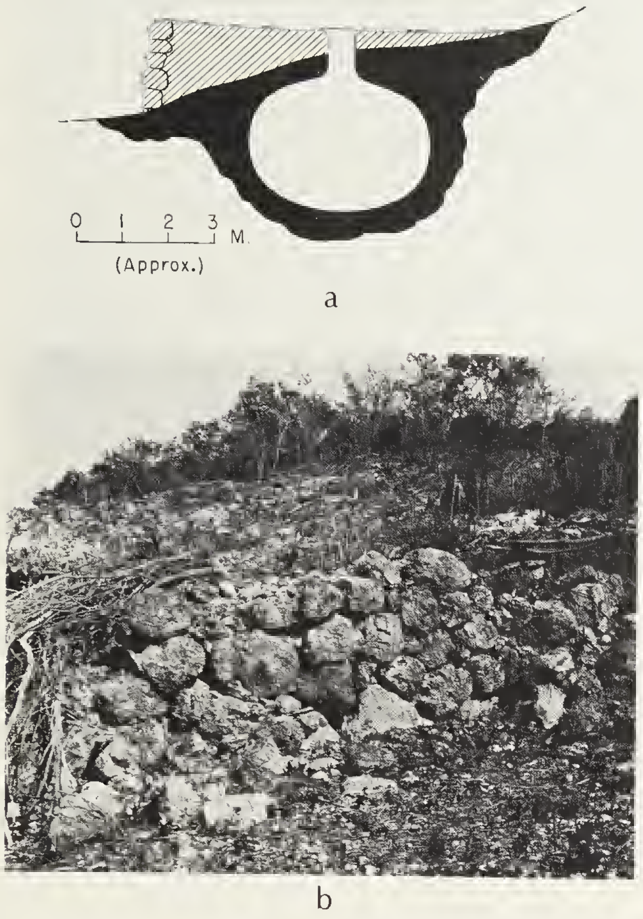


Figure 879. Xcorralcot, Chultun Platform: a, sketch section (solid black represents bedrock); b, terrace wall, looking east.

upper surface of the terrace or platform, which presumably once carried a finished plaster floor, gently sloped from all sides to the cistern's mouth. It is reputedly the retaining wall of this platform, built of rough stone blocks, that gives the site the name of Xcorralcot (corral of dry stone).

MISCELLANEOUS NOTES

No altars were observed at Xcorralcot.

Two ruins were seen from the East Group but were not visited. They lay to the northwest at distances of approximately 1 and 2 km.

Kanki

Upon leaving Kanki, I wrote the following in my diary:

> I feel that we could have stayed at Kanki almost indefinitely. Every hilltop has a ruin, every savanna is surrounded by them. From the *casa principal* [i.e., at Kanki hacienda] we could see several nearby groups, one of which we never got to because of simple pressure of work. From nearly every hilltop ruin can be seen others, near or distant, not to mention outlying groups of the immediate ruin. Obviously, all that a survey can hope to do under these conditions is to obtain what seems to be an adequate sample. . . .

Not mentioned in the diary, but implicit in the description of the region, is the difficulty of determining the limits of any one site when faced with an almost endless succession of ruins in every direction.

ETYMOLOGY

Meaning obscure. Roys (personal communication) writes, "*Kanci* (hard c) would mean 'yellow agave'; but I've never seen such a term." Variant spelling: Canki.

SITUATION

Approximately 14 km southeast of the town of Tenabo, 7–8 km south of Xcocha, and shorter distances from Xtampak, Bolonchoch, and Xcorralcot (see those sites, above). Observations on Polaris with transit showed Kanki hacienda to be at latitude 19°58′ N.

TOPOGRAPHY

Center of site on small hills bordered on east and west by large savannas. Outlying groups both on savanna floor and on hills. I think, but am not certain, that large western savanna, which curves around to south of site, is named Kanki.

WATER SUPPLY

Large aguada in savanna short distance east-northeast of South Group. Water hole, which was dry at time of our visit (May 1940), seems to be at least partly artificial as it is bordered by large mounds of savanna soil. Usual large number of chultuns observed in ruins. Nearest modern well at Kanki hacienda about 1 km south-southwest of center of site.

SIZE

Central group of ruins does not cover large area but shows exceptionally high concentration of building remains. Extent of site depends on what outlying groups are included. For lack of more thorough exploration or of mapping, we are at present limiting the site to the five nearest groups, the farthest being less than 1 km distant from the center of the site. There may well be other nearby ruins not found by us.

CIVIC PLAN

Center of site a tightly packed aggregation of adjacent courts and buildings. Outlying groups of buildings located on savanna and on hills follow pattern we have seen throughout the area. Apparently facing pyramids in the South and West Groups (see below) open the possibility of an axial or at least interrelated arrangement of structures in separate groups.

Orientation. Bearing from pyramid in South Group to pyramid in West Group is approximately 18° north of west. Only two buildings on which observations were taken, both in Main Group, show longitudinal axes 9° south of east and north of west and 19° east of north and west of south.

MAIN GROUP

Although the center of the site does not cover a large area, the concentrated assemblage of courts and buildings represents a considerable amount of construction. Unfortunately, the buildings are in a deplorable state of preservation. On the western side of the group a large, badly fallen mound shows several superimposed buildings or parts of buildings. Only fragments of masonry are showing, all of it seemingly of well-cut, faced, and fitted wall stone, full-width jamb stones, and well-faced and fitted semispecialized vault stone. Surprisingly, there appears to be little change in character of masonry throughout the sequence of construction. A partly exposed facade on the south side of the mound carries a medial molding of three rectangular members, like that on a building in the North Group (see fig. 887), and overlays an earlier facade that seems to be of identical design. Doorway columns were seen in the debris of this structure.

East of the building just described, and on the west side of a court with structures on all four sides, is a building with one standing vault that is flanked on each side (i.e., east and west) by fallen secondary construction. The early walls are of small, well-cut, faced, and fitted stone on the exterior and small, less well-finished stone on the interior (fig. 880a). Doorjambs are built of cornerstones and wall stones and support a stone lintel that does not cover the full width of the jambs (fig. 880b). In the west wall, which evidently was the old front wall, is a small rectangular window at each end of the room in the second course below the vault spring. Vault stones are small, fairly well faced but not very well fitted, and with only a slight tendency to specialization (fig. 880).

On the south side of the court of which the structure just described is the western building, and near the southern limits of the Main Group, is the best preserved structure in the group. Referred to as the South Building, it will be described in detail below. Altar 1 was found in front (north) of this structure (see Monuments, below).

The eastern building on this same court is a large, badly fallen structure that shows two building periods, the western part of which is the earlier. The masonry of that part is quite similar to that of the standing room in the structure across the court to the west (see above). The later eastern part of the building, a single range of rooms built against the rear (east) wall of the earlier structure, faces east on yet another court. The masonry shows large finely-cut, faced, and fitted wall stone, full-width jamb stones, and large, finely-faced and fitted, specialized vault stone (fig. 881).

Still farther east and near the eastern edge of the Main Group is a badly fallen structure of two stories. The masonry is comparable to the eastern part of the building just described, but the specialized vault stones are smaller. Observed in the debris of the structure were a doorway with corbels and stone lintel (fig. 882) resting on jambs made of full-width stones, another doorway of two columns, and banded split columns from the facade.

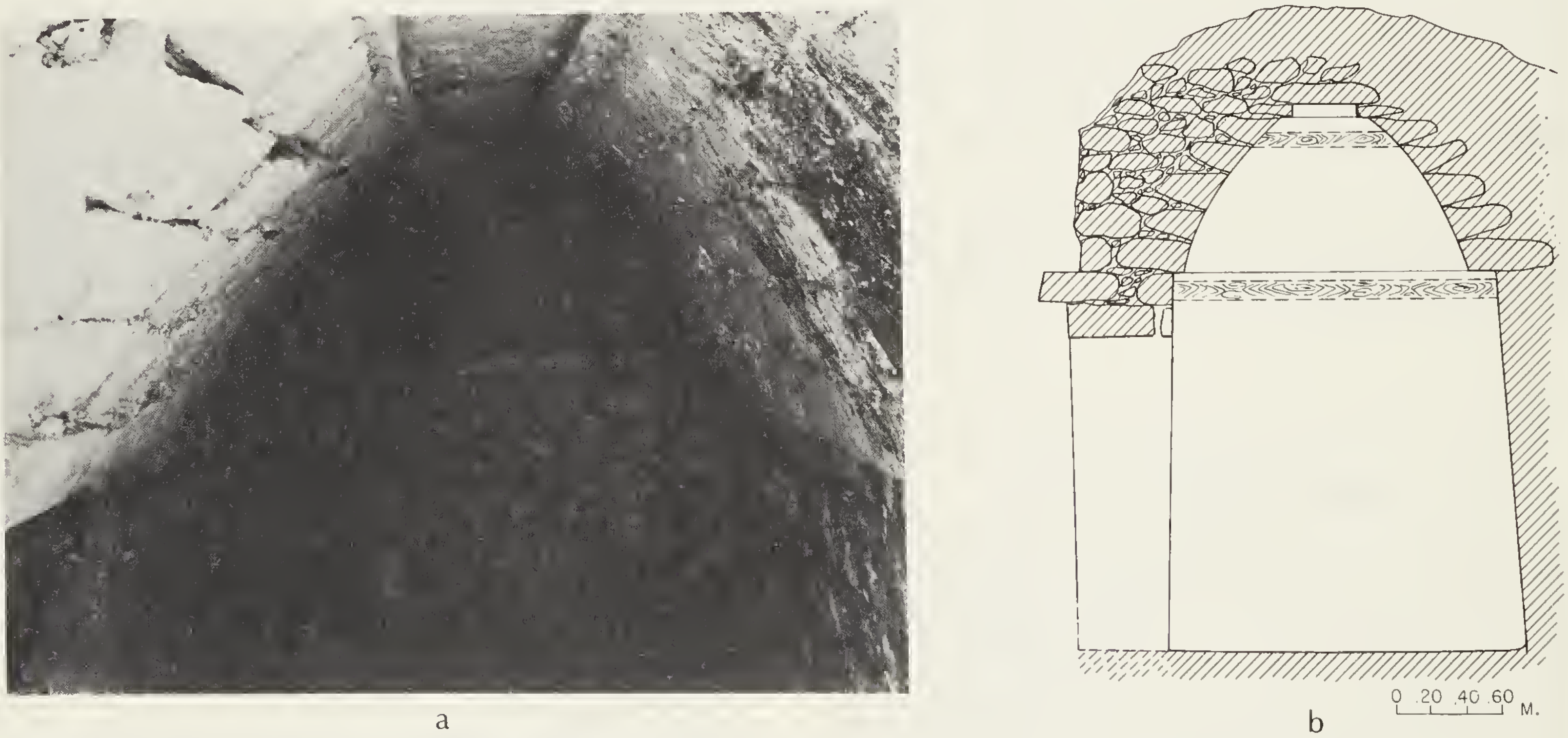
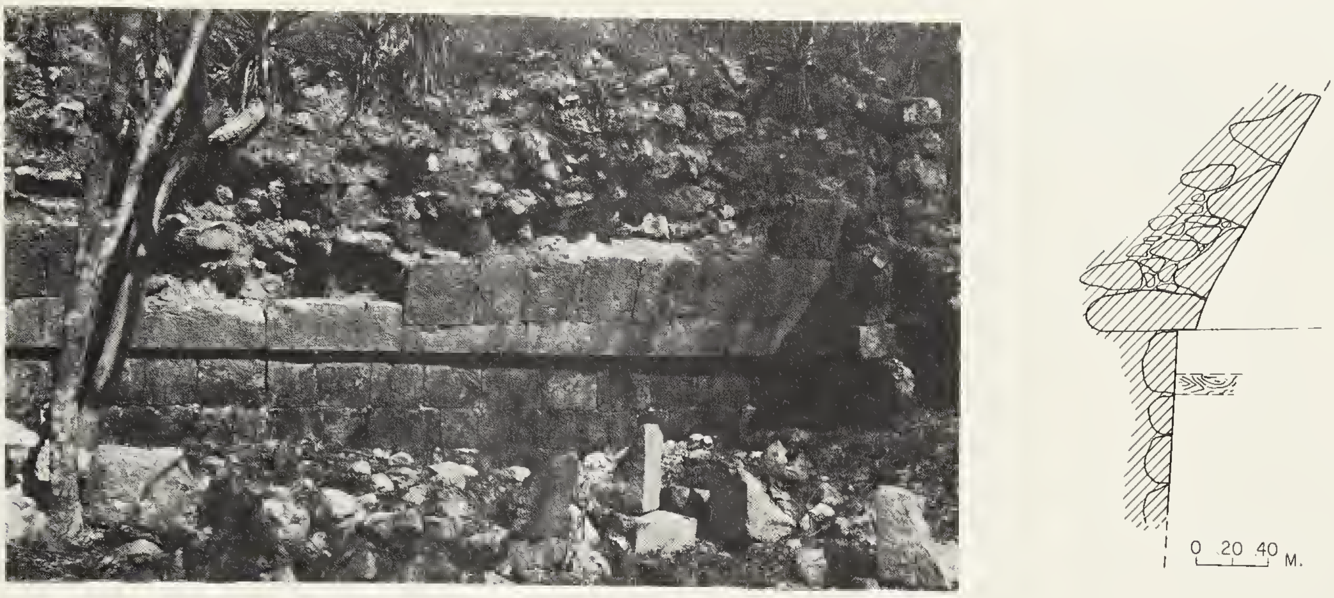


Figure 880. Kanki, Main Group, building northwest of South Building. Room with standing vault: a, view from south; b, transverse section.



a

b

Figure 881. Kanki, Main Group, building northeast of South Building. Eastern range: a, remains of wall and vault, looking west; b, section of same wall and vault.

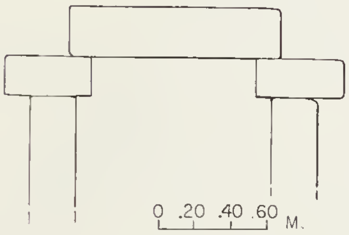
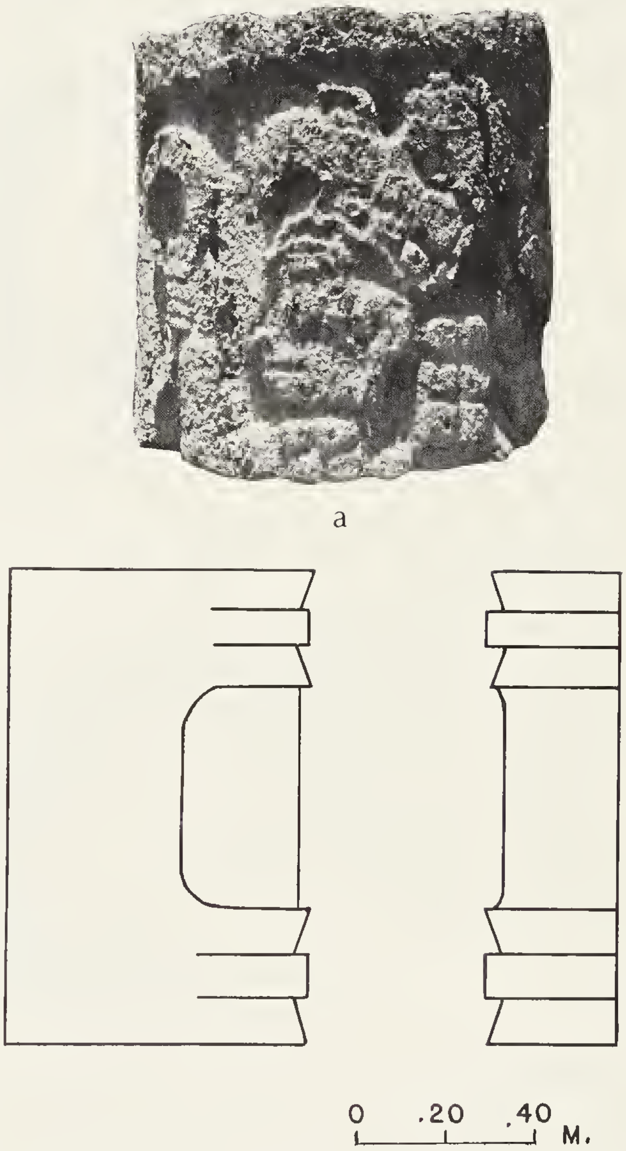


Figure 882. Kanki, Main Group, East Building. Elevation of doorway.

Two carved stones no longer associated with the buildings from which they came were seen in the Main Group. Near the southwest corner of the group is a jamb stone of which the front edge is sculptured to form a banded facade column (fig. 883b) like those seen in buildings at Xcalumkin (cf. figs. 726, 728, 758). The stone is 1.06 m high, .60 m wide, and .30 m thick. Presumably another stone with a single band completed the jamb. At the north edge of the Main Group is a sculptured stone that evidentally was the topmost drum of a door column (fig. 883a). The drum measures .44 m high by .45 m in diameter. The bas-relief carving shows the head of a human figure. Unfortunately, the remainder of the column was not found.

The usual chultuns were observed and one such cistern on the north edge of the group carried an animal figure in stucco relief on the well-preserved plastered interior (fig. 884). The figure, with head broken off, measures .14 m high, .16 m wide, and stands out .025 m in relief. It is located about halfway down the chultun wall which was covered with a layer of stucco .05 m thick, and finished with a polished plaster surface. One cannot identify the animal depicted with certainty, but the figure suggests to me a turtle.



a

b

Figure 883. Kanki, Main Group. Fallen architectural sculpture: a, carved column drum; b, sculptured jamb stone.

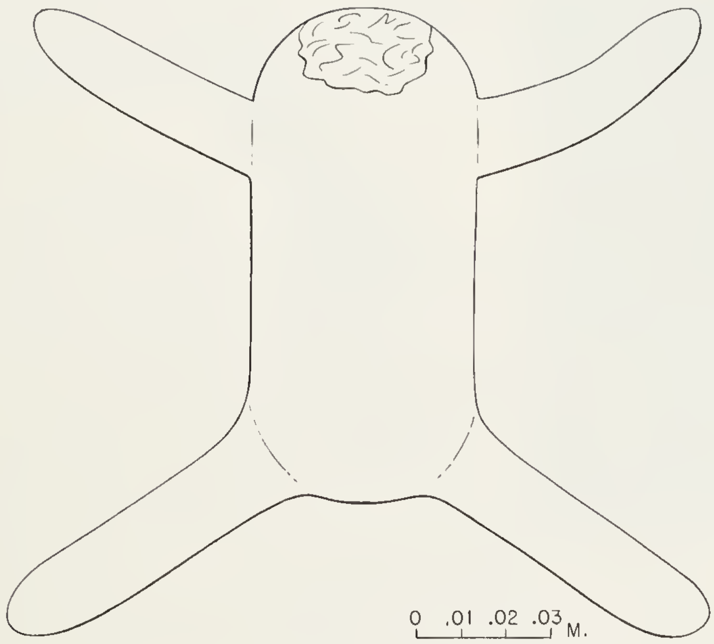


Figure 884. Kanki, Main Group. Modeled animal figure in stucco on wall of chultun.

South Building

As mentioned above, this structure is located near the southern edge of the Main Group and on the south side of a court with buildings on all sides. Considerably fallen, it is nevertheless the best-preserved structure in the Main Group. Altar 1 (see Monuments, below) rests in the court before the building.

SUPERSTRUCTURE

Plan. See figure 885a.

Base Molding. Single course of dressed stone projecting .05 m from wall above (fig. 885b, c).

Walls. Heavy. Outer walls and inner transverse walls .68 m thick; medial wall 1.30 m thick. Walls thicken from floor to spring of vault, the inner face of each wall inclining toward center of room (fig. 885 b, c).

Facing stone, both inside and outside of building, quite well cut, dressed, and fitted, but notably smaller than most wall stone and relatively deeply tenoned into hearting (fig. 886).

Doorways. Jambs built of wall stones and cornerstones (fig. 885c). Stone lintels. West doorway secondarily blocked (see Secondary Construction, below).

Wall Openings and Depressions. Cordholder on inner wall of west room just north of doorway (fig. 885b),

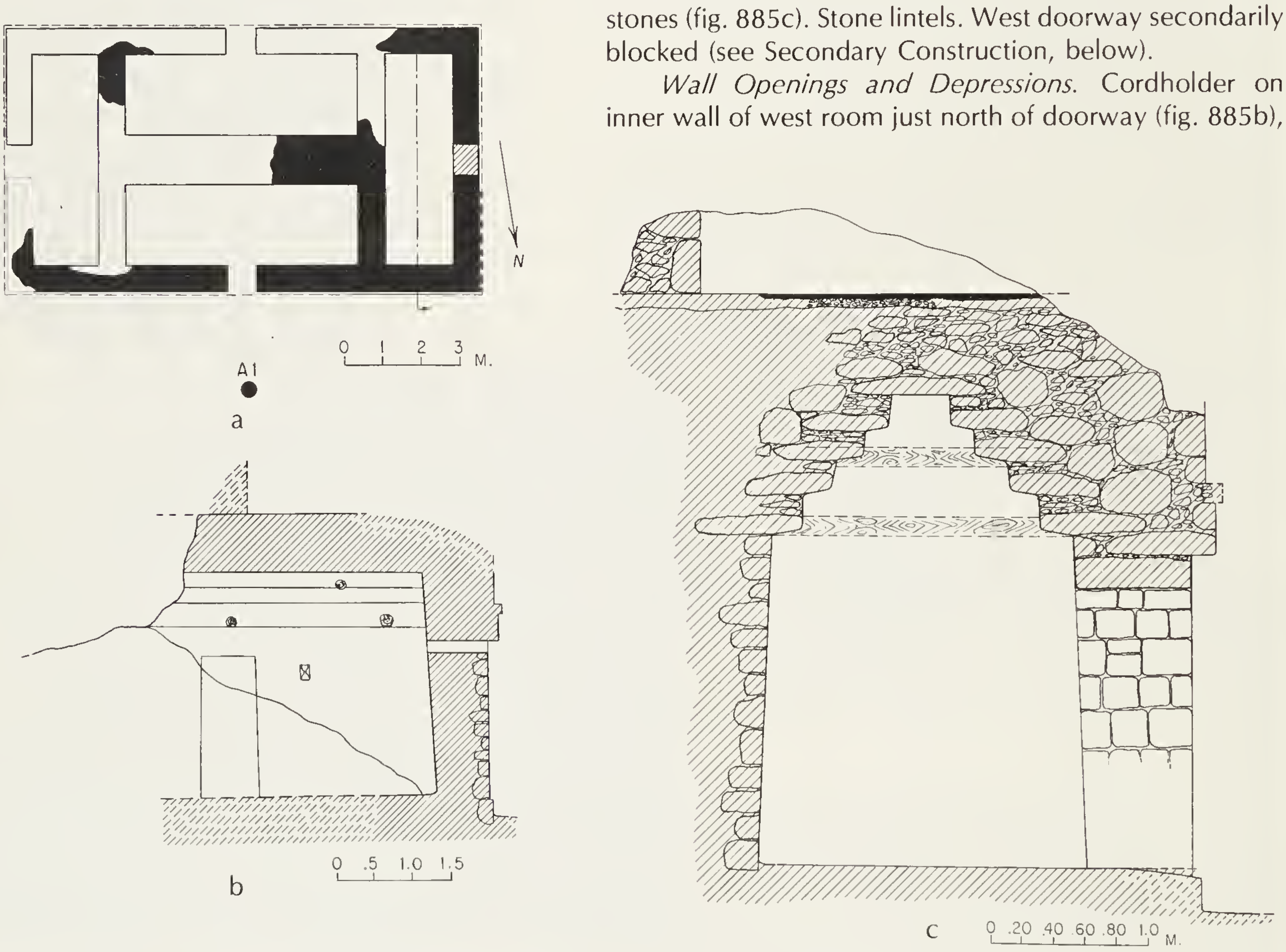
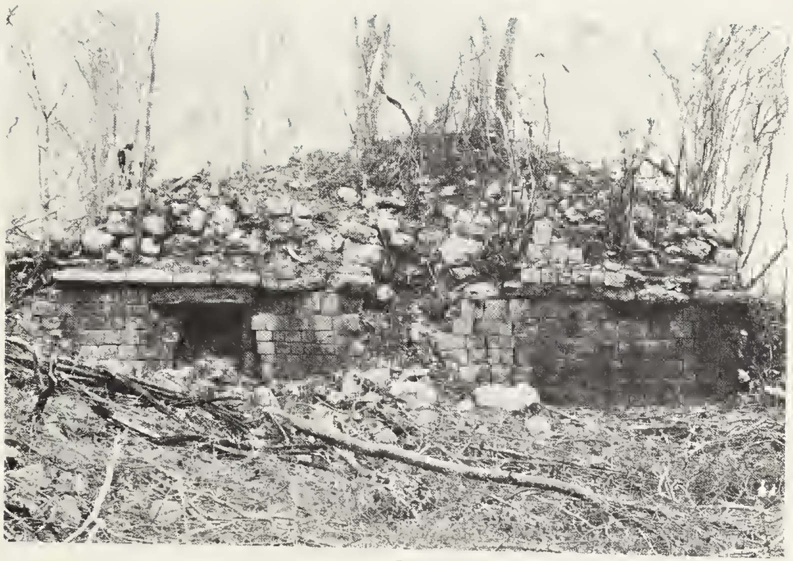
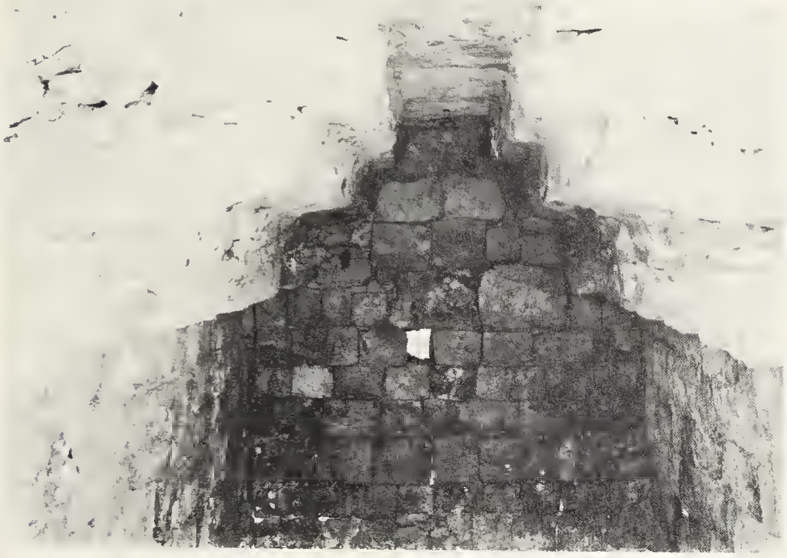


Figure 885. Kanki, Main Group, South Building: a, plan; b, longitudinal section through west room; c, transverse section through north room.



a



b

Figure 886. Kanki, Main Group, South Building: a, view from north; b, interior of west room, looking north.

and presumably one, now hidden by debris, at south of doorway.

Small rectangular window or ventilator just under medial molding in north wall of west room (figs. 885b, 886b). Similar windows in north room and undoubtedly in other rooms but locations not recorded.

Vaults and Beams. Stepped vaults of rough slabs trimmed at exposed ends and resting upon thick bed of small stones and mortar (figs. 885c, 886b). Buried ends of slabs weighted with large unshaped stones. Four steps in vaults of north and south rooms, three in east and west rooms. Vaulting like that seen at Chelemi and elsewhere (see p. 469) except that here ends of vaults rise vertically on plane of lower wall instead of stepping inward.

Three beams, one at each end of room and one at center, had been in spring course of vault; two beams between second and third steps of vault (fig. 885b, c).

Moldings. Only portion of medial molding and two courses of vertical upper facade remain in place (figs. 885c, 886a). First member of molding rectangular and made of two courses. Above this is narrow interval of unfinished masonry below facing of upper facade. May originally have been small second member of molding made of stucco, or space may have been covered by curve of heavy plaster coating of upper facade and molding.

Roof. Exceptionally heavy roof cap .65 m thick over north and south rooms (fig. 885c) and about .75 m over end rooms. Otherwise of normal construction.

Roof Structure. Fragment of roof comb faced with roughly cut and dressed stone over medial wall (fig. 885c). Only two courses remain but amount of debris on roof indicates roof comb stood to some height.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Later building, now badly fallen, added to west end of original structure. New building seemingly faced west, on which side there are the remains of a doorway of two columns. Wall masonry is of well-cut, faced, and fitted stone, doorjambs are of full-width stones, vaults employed well-cut, faced, and fitted, semispecialized and specialized stone. The blocking of the west doorway of the early building was presumably done when the new structure was added.

NORTH GROUP

Some 200–250 m north of the Main Group is an assemblage of buildings tightly clustered around several courts. The ruins are badly fallen but several structures show some standing masonry, one with a section of upper facade intact but for the final course or courses of the cornice molding (fig. 887). The wall masonry is of the small-stone variety usually associated with small-stone jamb construction, but no doorway is visible to confirm this association here, nor is there any vaulting to be seen. An odd arrangement of well-cut and finished stones, seemingly decoration of some sort, projects from the facade just above the medial molding (fig. 887). Observed in this group were examples of small-stone jamb construction, jambs made of large full-width stones, and an extraordinary number of column drums and shafts, presumably from doorways.

A piece of sculpture unrelated to any building was found in this group (see Miscellaneous Sculpture, below), and several monolithic altars were noted but not recorded.

SOUTHEAST GROUP

About 100 m southeast of the Main Group is a small cluster of buildings around a court. It is possible that this court should be considered part of the Main Group, but for lack of mapping or more thorough exploration I am keeping the two separate. The only structure in good enough state of preservation to show any architectural detail is a building of two stories on the south side of the court. In the court

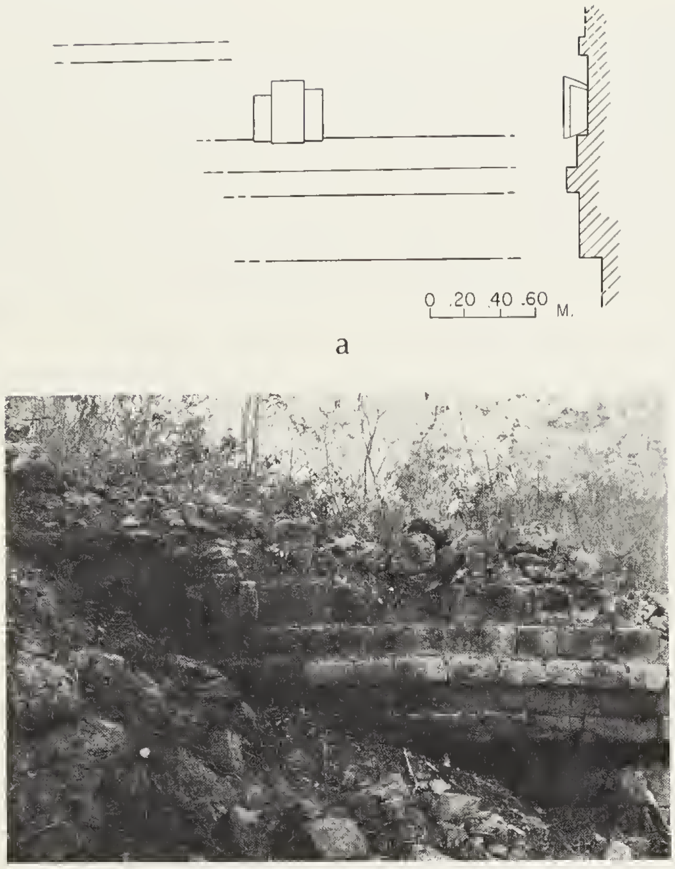


Figure 887. Kanki, North Group, building with partly standing facade: a, elevation and section of fragment of upper facade; b, view from west.

in front of the building is Altar 2 (see Monuments, below).

The south building consists of a lower story of a single range of rooms that faces south where a stairway rises over a vaulted passageway to a second story that rests on a level slightly higher than the courtyard to the north. The masonry of the lower story shows moderately well-cut, faced, and fitted wall stone, doorjambs built of small stones, and vault stones moderately well faced and fitted and only slightly specialized. The stairway seems to be contemporary with this range of rooms.

The masonry of the second story is in sharp contrast to that of the first story. The walls, which rise from a simple base molding of a single course of finely cut and finished stone, are made of large, beautifully shaped and fitted stones that average .50 m each in height (fig. 888). Only the first course of the medial molding, a rectangular member, remains in place.

SOUTH GROUP

Approximately 350–400 m south of the Main Group is a good-sized assemblage of structures located for the most part on the savanna floor. Some 100 m east-northeast of the approximate center of the group is the aguada already mentioned (see Water Supply, above). What was probably the most important structure in the South Group is a pyramid temple that now stands to a height of about 7 m, the superstructure, or temple building, almost totally fallen. Such traces of wall as remain are of small, moderately well-cut and faced stone. The temple seems to have faced west, apparently toward a similar pyramid temple in the West Group (see Civic Plan, above), and at the foot of the pyramid on that side are three altars (see Monuments, Altars 3–5, below).

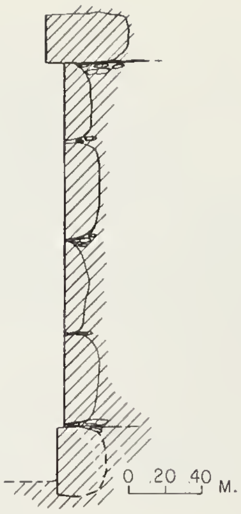


Figure 888. Kanki, Southeast Group, South Building. Section of wall masonry of second story.

Several courts surrounded by buildings, all fallen, lie east of the pyramid, and just south of the aguada is another court, also surrounded by fallen buildings, in the fall of one of which were the remains of a doorway with one or more banded columns like those seen at Xcochkax and Naox (see figs. 646a, 663). Two column drums, each .50 m in diameter and .62 m high, and a banded element, .58 m in diameter and .42 m high, were found.

Off the southeast corner of the pyramid is a court with three large altars (Altars 6–8) in an east-west line across its center (see Monuments, below). A causeway 4.25 m wide and paved with flagstones begins at the southwest corner of the court and runs westward about 250 m across the savanna where it bends southwest for another 200 m or so to end at a large mound that has been stripped of all facing stone, being no great distance from the hacienda buildings. Before reaching its western end, the causeway ascends a low platform—at which point was found Altar 9—and continues at that level to the large mound. Altar 10 was found at the northwest side of the causeway and Altar 11 at the foot of the terminal mound (see Monuments, below).

FURTHER SOUTH GROUP

Some 250 m south of the pyramid in the South Group is a hilltop group of fallen buildings around several courts. One exceptionally small vault that employs only two courses of stone from spring to corbels under capstones is visible. Vault stone is moderately well cut, faced, and fitted. Another fallen building shows the remains of a columnar doorway with full-width jamb stones and two columns with flatly rounded sides, a type of column we have frequently seen in the Campeche sites. Several chultuns were observed in this group.

WEST GROUP

West and a little south of the Main Group, at a distance of about 800 m, a hill juts eastward into the western edge of the savanna, and on its crest is located a small group of 6 or 8 mounds. The only partly standing building exhibits wall and vault masonry almost identical to that seen at Xcorralcot (see figs. 874–877), except for the projecting course at the vault spring in the other building but not at Kanki. Small rectangular windows or ventilators below the medial molding are present and the molding is also like that on the Xcorralcot structure.

On the east side of a higher courtyard south of the building just described is a pyramidal mound quite similar in size and height to the pyramid temple in the South Group (see above). The two structures seem to face each other and suggest some large plan involving the South and West Groups (see Civic Plan, above).

MISCELLANEOUS NOTES

Styles of masonry at Kanki cover almost entire range seen in Puuc area, only styles missing being the crude wall facing seen at Oxkintok and Bakna (see below) and possibly the very finest masonry found in some buildings in the Great Cities.

Extraordinary number of column drums and shafts, presumably from doorways, were observed, notably in the North Group and at the south and west edges of the Main Group. No cut-stone mask elements were seen at Kanki.

MISCELLANEOUS SCULPTURE

M1. Rectangular block of stone with simple geometric carving on one face (fig. 889). Height .40 m, width .36 m, thickness .36 m. Found in court east of building with partially standing facade in North Group. It is possible that this stone should be classified as a monument, but it is different from any known altar or other monument in the Puuc area.

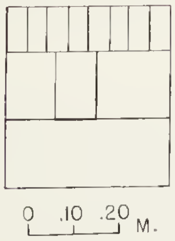


Figure 889. Kanki. Miscellaneous sculpture, M1, block of stone carved on one face.

MONUMENTS

ALTARS

There are more than 11 altars at Kanki, the largest number observed at any of the Campeche sites. Unfortunately, the altars in the North Group were not recorded as to number or location, so the total count for the ruins is not known. Nine of the altars at Kanki are associated with the pyramid-causeway complex in the South Group, and it is entirely possible that that is the important center of the site rather than the more heavily built-up Main Group.

Three altars, all of the rectangular variety, are carved with simple moldings around their tops. Only one altar, which is plain, is known to be of the drum type; the others, which include the carved examples, are rectangular altars, column altars (see p. 135 for definition of drum and column altars), or of unknown type owing to lack of data.

Altar 1. Plain (fig. 890a). Height .33 m, diameter at top approx. .45 m, at bottom .43 m. Lying in court in front (north) of South Building in Main Group. Drum altar with badly weathered upper surface. Measurement of diameter of top an approximation.

Altar 2. Carved (fig. 890b). Height .96 m, width at top .49 m, thickness at top .49 m. In front (north) of building on south side of court in Southeast Group. Square altar with three-member molding, a common form in Campeche sites.

Altar 3. Carved (fig. 890c). Height approx. 1.18 m, width at top .56 m, thickness at top .40 m. At foot (west) of pyramid in South Group. Rectangular altar with two-member molding, a common form in Campeche sites. Monument badly eroded at base and measure of height an approximation.

Altar 4. Carved (fig. 890d). Height over .76 m, width at top .56 m, thickness at top .39 m. At foot (west) of pyramid in South Group. Rectangular altar with three-member molding, a common form in Campeche sites. Altar badly weathered or broken at base and original height was more, possibly considerably more, than present height.

Altar 5. Plain. Dimensions not recorded. At foot (west) of pyramid in South Group. I have no description of this monument other than that it was of the common cylindrical monolithic type.

Altars 6–8. Plain (?). Dimensions not recorded. In east-west alignment across center of court southeast of pyramid in South Group. I have no description of these altars other than that they are large and of the common cylindrical monolithic type.

Altar 9. Plain (?). Height 1.26 m, diameter .48 m. On causeway in South Group (see above). I have no further description of this column altar.

Altar 10. Plain (?). Height unknown, diameter .70 m. Beside causeway in South Group (see above). I have no

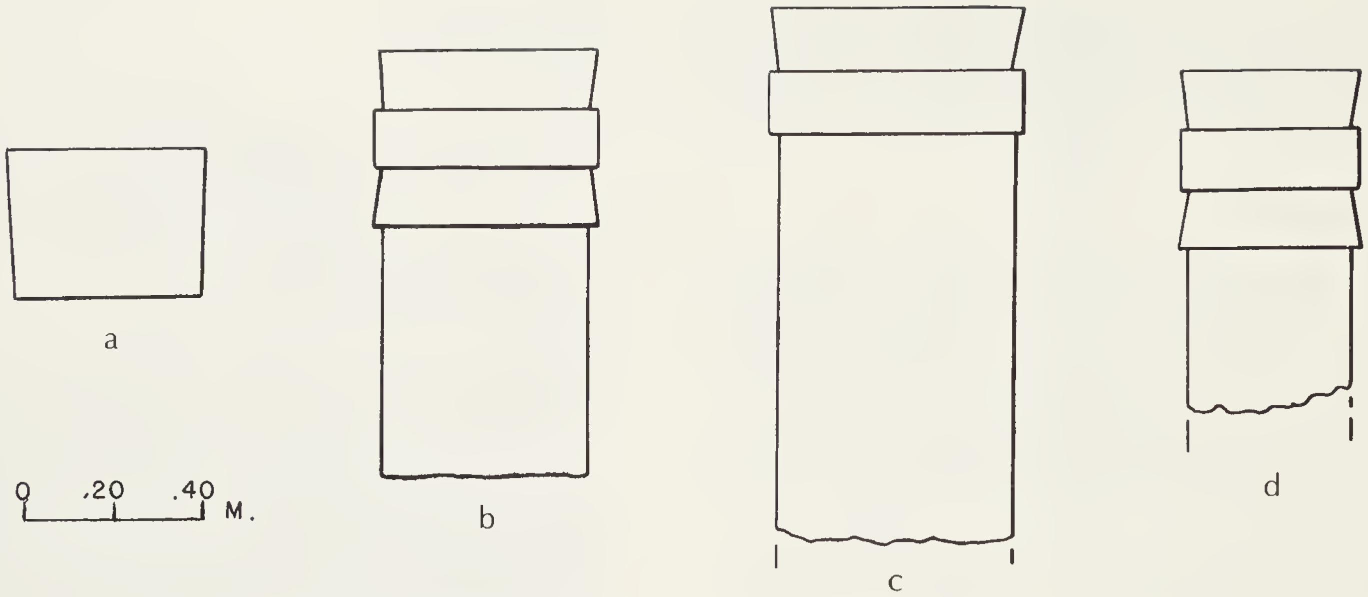


Figure 890. Kanki. Altars 1–4: a, Altar 1; b, Altar 2; c, Altar 3; d, Altar 4.

further description of this monument other than that it is circular.

Altar 11. Plain (?). Height unknown, diameter .84 m. In front of mound at west end of causeway in South Group (see above). I have no further description of this altar other than that it is circular.

Cacabbeec

It is possible that these ruins should be treated as an outlying group of the much larger site of Kanki. Cacabbeec is, however, over 1 km distant from the Main Group of Kanki and, according to the local inhabitants, carries its own place-name, so for the present it seems best to treat the ruins as a separate site.

ETYMOLOGY

cacab, high fertile land (Roys 1935, p. 7; and see Pollock 1970, p. 35); *beec,* large tree locally called oak but in fact *Epretia tinifolia* L. (Roys 1931, p. 217). Other name: Kanki.

SITUATION

Approximately 1.2 km southwest of Main Group of Kanki and 1.5–2 km south-southeast of Xcorralcot.

TOPOGRAPHY

Ruins scattered over several hilltops.

WATER SUPPLY

Nearest natural water known is Kanki aguada (see p. 523, above) about 1 km to northeast. No chultuns observed by us but almost surely present. Modern well at Kanki hacienda about .5 km east-southeast of Cacabbeec.

SIZE

Unknown beyond there being several groups of structures.

CIVIC PLAN

Unknown. Presumably several courtyard groups but the relation of one to another not known.

SOUTH GROUP

This is the only group we visited at Cacabbeec. I have no description of the group, and only one building, in which one vault was standing, was closely examined.

Building with Standing Vault

This structure shows at least two periods of building, the earlier of which lies to the north and is unintelligible without excavation. A number of the rooms seem to have been filled secondarily with masonry. A southern addition of four rooms (fig. 891) has one standing vault (Room 3).

SUPERSTRUCTURE

Plan. See figure 891. Sketch plan.

Floor. Remains of hard plaster floor of usual construction and color in Room 3.

Walls. Masonry of moderately well-cut, faced, and fitted stone of style normally associated with small-stone doorjambs.

Doorways. Jambs of doorway to Room 3, and presumably of doorway to Room 2, built of cornerstones with spalls filling space at center of jamb (cf. fig. 852). Jambs of doorways to Rooms 1 and 4 made of full-width stones with front edges carved to simulate banded split columns (fig. 893a, b; and see p. 525). Lintels of stone; one over doorway to Room 1 carved on front edge and on under-

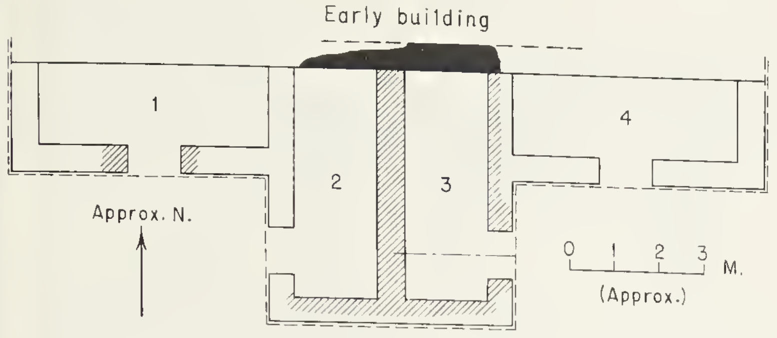


Figure 891. Cacabbeec, South Group. Sketch plan of Building with Standing Vault.

surface (see Decoration, below). Lintel from Room 4 not found.

Wall Depressions and Projections. Cordholders of tongue-at-center-of-stone variety (fig. 892a) on inner wall at each side of doorway to Room 3. Hemispheroid rod sockets .06 m in diameter (fig. 893b) in jambs of doorways to Rooms 1 and 4.

Projecting geometric design in cut stone (fig. 892, and see Decoration, below) at north end of Room 3, and rough stone peg projecting about .14 m at same end of room and another in west soffit of vault.

Vaults and Beams. Quite well-cut, faced, and fitted, semispecialized vault stone. Vault of Room 3 is high in proportion to width (fig. 892).

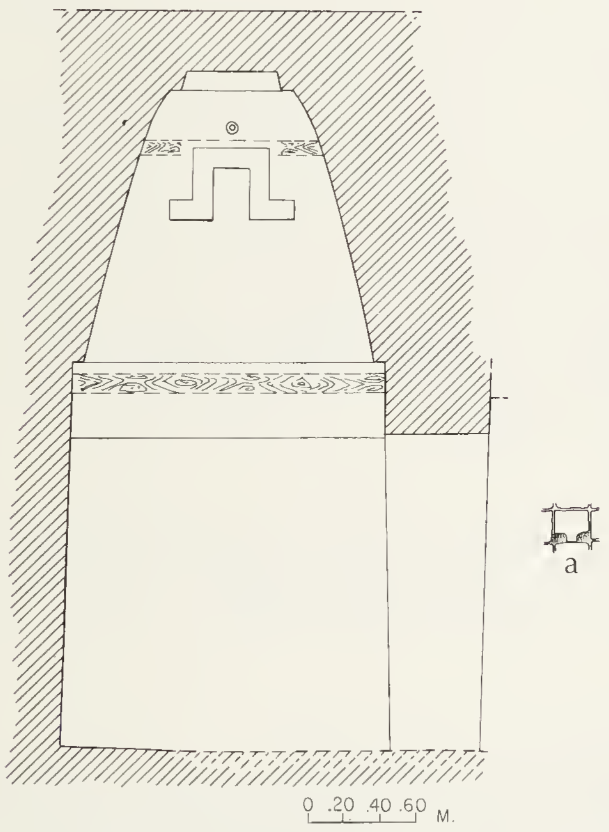


Figure 892. Cacabbeec, South Group, Building with Standing Vault. Transverse section through Room 3: a, detail of cordholder inside doorway.

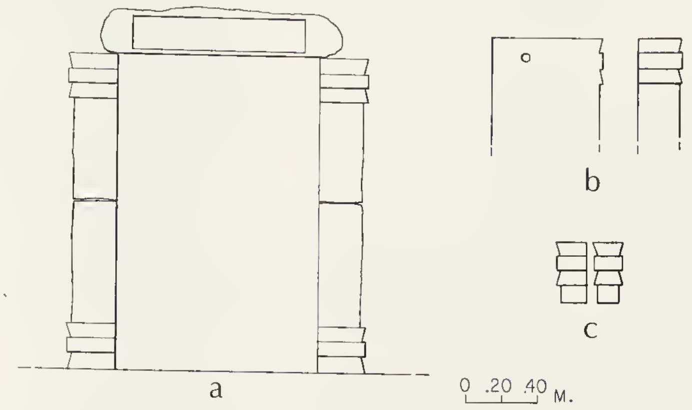


Figure 893. Cacabbeec, South Group, Building with Standing Vault: a, restored elevation of doorway to Room 1; b, detail of face and edge of top stone in east jamb of doorway to Room 4; c, profile and elevation of fallen band element from split column.

Beam sockets just below spring of vault at each end of Room 3. Also sockets for two beams at three-quarters height of vault.

Molding. Only molding visible is heavy rectangular member across north end of Room 3 (fig. 892) that once was medial molding on early building. Molding measures .41 m high.

Roof. Amount of debris on roof indicates there had been second story, probably located over filled rooms in early building.

Decoration. Front edges of jambs of doorways to Rooms 1 and 4 carved in imitation of split columns with bands at top and bottom (fig. 893a, b). Fallen band elements (fig. 893c) suggest walls carried other split columns.

Fallen lintel from doorway to Room 1 carries bas-relief carving of two human heads and eight glyphs on front edge and of elaborately accoutred warrior on underface (fig. 894; and see Proskouriakoff 1950, fig. 95g, labeled Kanki). The lintel has a maximum length of 1.42 m, width of .55 m, and maximum thickness of .26 m. For discussion of sculpture, see Proskouriakoff 1950 (p. 167), where the lintel is identified as coming from Kanki.

Simple geometric design executed in cut stone at north end of Room 3 (fig. 892). Stones project .04 m from wall. Rough stone peg above design suggests previous existence of further decoration in plaster or stucco.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Southern addition of Rooms 1–4 clearly secondary to earlier northern building but nothing known of character of early structure beyond fact that some rooms were secondarily filled with masonry. Impossible to tell without excavation if Rooms 1 and 4 are later than, or contemporary with, Room 2, 3. Judging by off-center location of doorways to Rooms 2 and 3, apparently to allow for Rooms 1 and 4, seems probable the four rooms were planned and built at one time. Filled rooms in early north

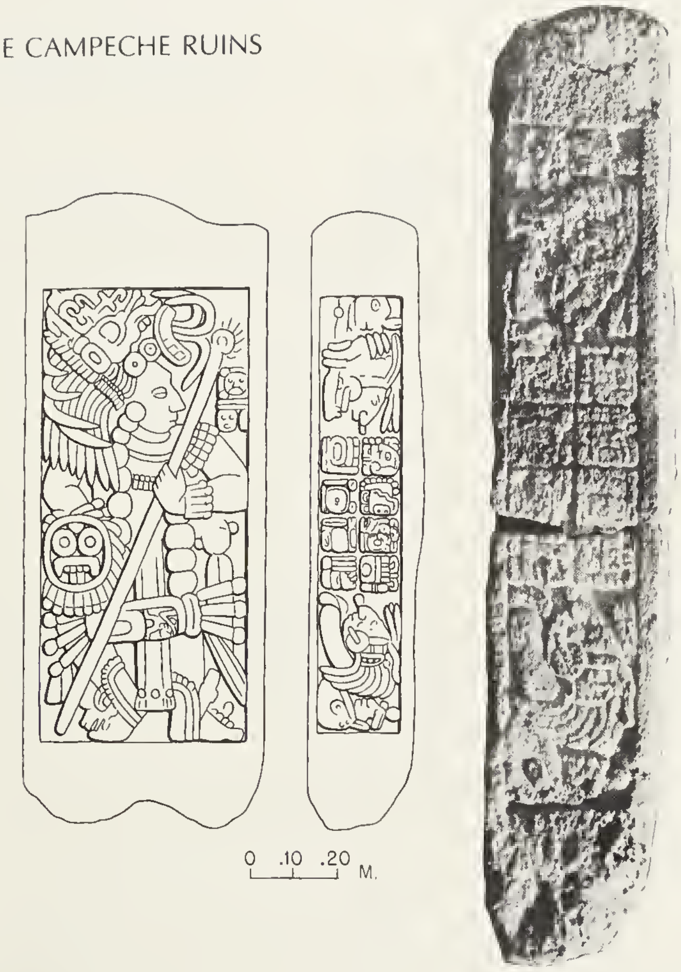


Figure 894. Cacabbeec, South Group, Building with Standing Vault. Sculpture on front edge and underface of lintel from doorway to Room 1.

building suggest that second story was later than early structure but cannot say at present whether second story was earlier than, contemporary with, or later than, southern addition (Rooms 1–4).

Maioch

ETYMOLOGY

According to our native laborers, *mai* = hand or paw, *och* = opossum (and see Roys 1931, p. 337). Roys (personal communication) says *mai* or *may* can mean hoof, but questions the association of the word with *och*.

SITUATION

About 7 km south of Kanki, the same distance north of Hacienda Bohola, and possibly 10 km northwest of Bakna.

TOPOGRAPHY

Main concentration of structures located on low natural rise at edge of large savanna that stretches away to east and southeast. Small structures extend out on savanna floor, and there are hilltop ruins to the south.

WATER SUPPLY

Large aguada, dry at the time of our visit (May 1940), about 1 km southeast of ruins. No chultuns noted at site but very probably there. Modern wells at haciendas of Kanki, Chilib, and Bohola, and there are probably other settlements even closer.

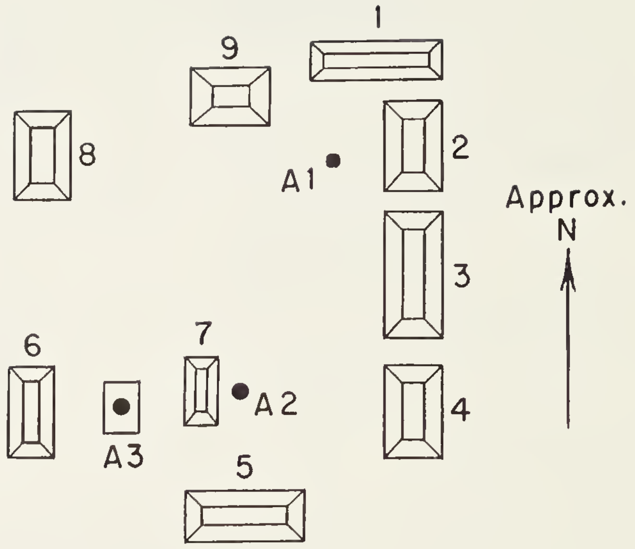


Figure 895. Maioch. Sketch plan of ruins.

MAP

None other than sketch plan given here (fig. 895).

SIZE

Dimensions of Main Group not recorded but structures are large and one has impression of fairly important site.

CIVIC PLAN

Carefully planned civic center with fairly large pyramid facing south along principal axis of large court or plaza with structures on all sides (fig. 895). Possibly owing to the relatively large size of the group and of its mounds, one is reminded of the North Plaza at Oxkintok (see fig. 477). Outlying groups of buildings and low platforms on the savanna and on hilltops were not explored.

MAIN GROUP

The ruins are in a deplorable state of preservation and very little standing masonry was observed. Five altars, three of them located on the plan (fig. 895), were seen and recorded (see Monuments, below).

Structure 1

Mostly fallen building at northeast corner of group. Fragments of walls show them to have been built of well-cut, faced, and fitted stone. Doorways employed large, full-width jamb stones. Large split columns, .30 m in diameter, had decorated lower zone of facade.

Structures 2–4

Three large high mounds along east side of plaza. No traces of buildings on these mounds and hardly a single faced stone observed in the debris. Altar 1 (see Monuments, below) rests in front of Structure 2.

Structure 5

Badly fallen structure with well-cut and faced wall stone in debris.

Structure 6

Large mound with low rectangular platform and Altar 3 (see Monuments, below) in front of it.

Structure 7

Badly fallen structure that seems to have had walls of rough masonry and crude slab vaulting, but some excavation necessary to be sure of construction. Altar 2 (see Monuments, below) lies just east of this building.

Structure 8

Small pyramidal mound without distinguishing features at northwest corner of plaza.

Structure 9

Good-sized pyramid, now badly fallen and with no visible remains of a superstructure, that presumably faced south down principal axis of plaza.

MONUMENTS

ALTARS

Altar 1. Carved (fig. 896a). Height over .46 m, diameter of top .40 m, of shaft or pedestal .32 m. In plaza in front (west) of Structure 2. Column altar with flatly rounded sides and rectangular molding at top. Base of monument not excavated and total height not determined.

Altar 2. Plain (fig. 896b). Height unknown, diameter at top .45 m. In plaza just east of Structure 7. Circular altar deeply buried in debris. Not excavated and height unknown.

Altar 3. Plain (fig. 896c). Height .48 m, diameter 1.05 m. On low rectangular platform between Structures 6 and 7. Large drum altar. No further description recorded.

Altar 4. Carved (fig. 896d). Height .72 m, width at top .47 m, thickness at top .33 m. Found in Main Group, precise location not recorded. Rectangular altar with three-member molding on three sides, the fourth side being plain.

Altar 5. Plain (fig. 896e). Height .60 m, diameter .34 m. Found in Main Group, precise location not recorded. Column altar of normal size. No other description recorded.

Bakna

ETYMOLOGY

Our native laborers translated the name as horn of the house, in which case the spelling should be *baac,* horns; *na,* house (see Martinez 1929, p. 126). Roys (personal communication) says literal meaning is *bak,* meat; *na,* house or mother, but he questions that meaning. He observes that *bac* usually means bone. Muller (1960) shows on her map the ruin of Bakne a short distance south of Pomuch but in text (ibid., p. 22) places the site 40 km from Pomuch. I do not have access to the Escalona Ramos article cited by Muller, but it seems likely that Bakna and Bakne are the same ruin.

SITUATION

Not well located. Native guide placed Bakna 2.5 leagues from Bohola, 1.5 leagues south of Bulte, 3 leagues from Sahcabchen, and 1 league north of Kambul, a league supposedly equaling 4 km. I believe the ruin to be approximately 10 km southeast of Maioch, 8 km east of Hacienda

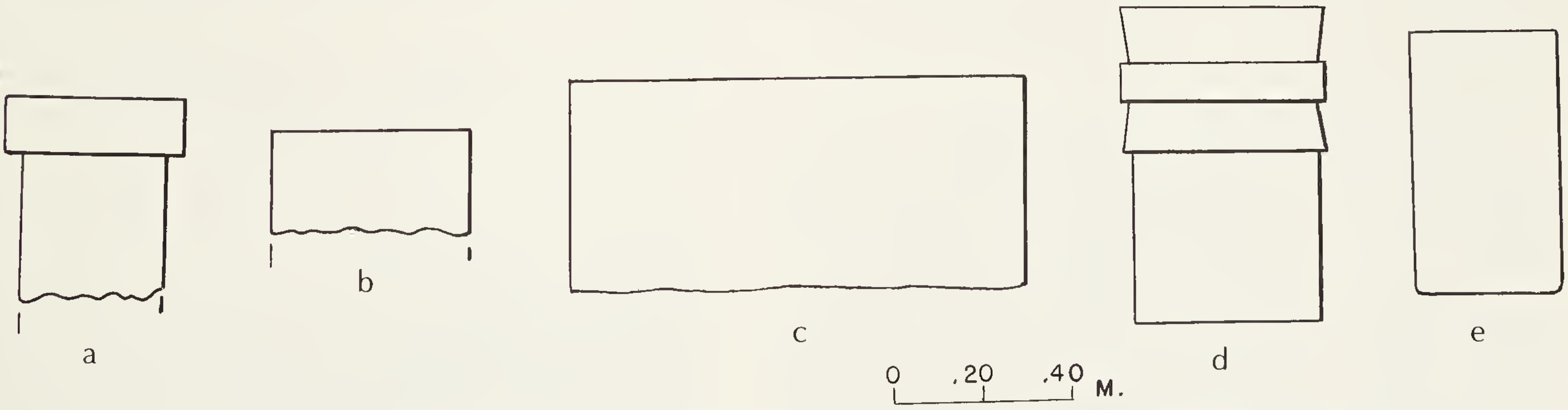


Figure 896. Maioch. Altars 1–5: a, Altar 1; b, Altar 2; c, Altar 3; d, Altar 4; e, Altar 5.

Bohola, and 10 km west of Sahcabchen, but there is the chance of considerable error in this estimate.

TOPOGRAPHY

Major part of site, if not all of it, seems to be in savanna of Bakna, from which the ruins take their name, but our explorations were not extensive. Many buildings and groups of buildings on savanna floor are probably founded on rocky outcrops (cf. Xcalumkin, p. 418).

WATER SUPPLY

Ruins lie short distance south and southeast of aguada of Bakna. Usual large number of chultuns seen in ruins. A well, now silted at bottom, marks site of long-abandoned modern or colonial settlement, and there reputedly was another such settlement, only recently abandoned at the time of our visit (1940), located less than 1 km south of the ruins.

SIZE

Not known, but our cursory examination of the ruins led us to think of the site as large and important compared to other sites in this general area.

CIVIC PLAN

Our hurried exploration of this large site was insufficient to give any understanding of the civic plan. I received the impression that the extensive and relatively thickly clustered ruins that lie for the most part north of the road (in 1940) from Bakna to Sahcabchen were the main central group at the site, but cannot be certain. South of the road is another large group of structures. Because of our ignorance of the plan of the site, or even of individual groups, I describe the remains we examined largely by individual structures rather than by groups.

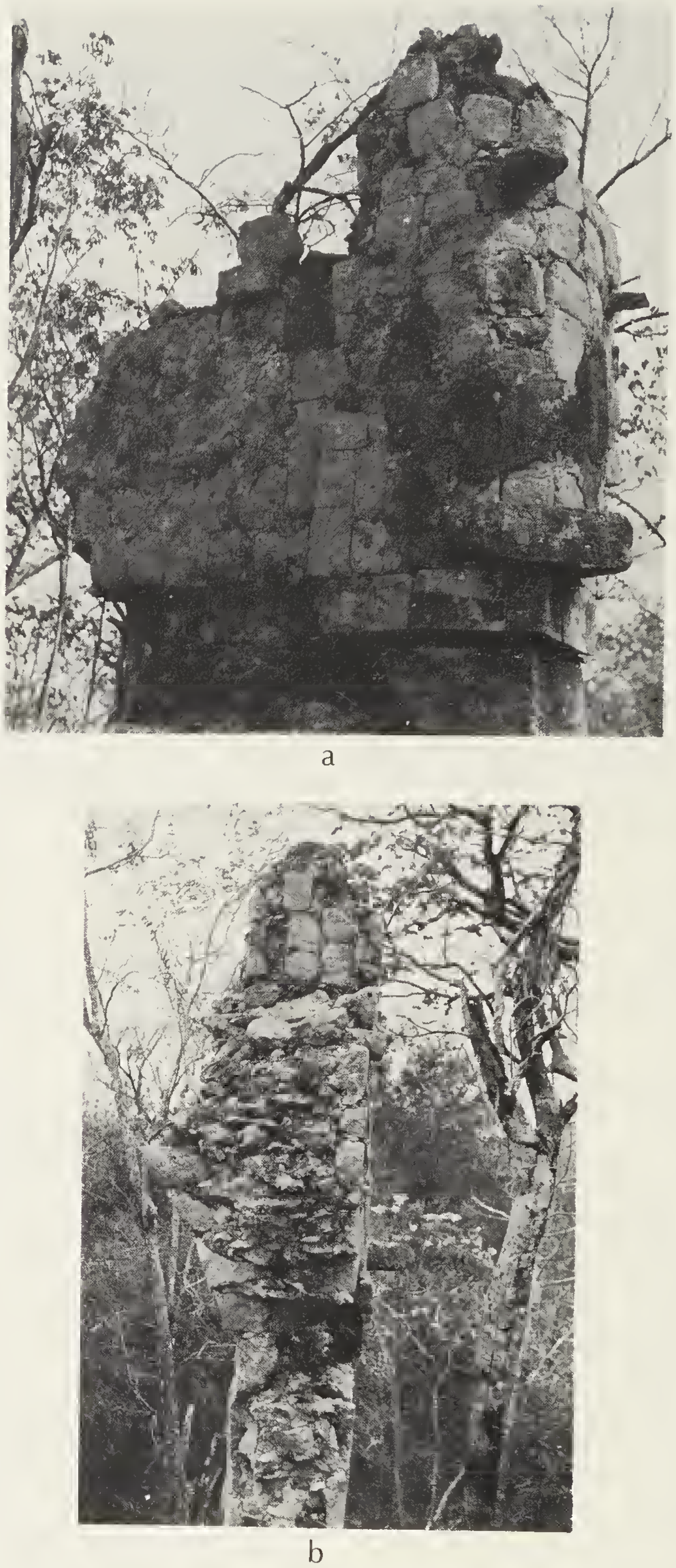
Pyramid Temple

On the north side of the road from Bakna to Sahcabchen is a large platform with a pyramid temple on its north side. The pyramid is about 8 m high and the temple building, of which only the northwest corner remains standing, presumably faced south.

SUPERSTRUCTURE

Plan. Not discernible without excavation.

Construction. Simple rectangular base molding. Moderately well-cut, faced, and fitted wall stone (fig. 897a). Vault stone comparable to wall stone in quality and fairly specialized (fig. 897b). Medial molding of two rectangular members (cf. figs. 768, 769). Vertical upper facade, rounded at corner of building, carries projecting stone tenons and remnants of stucco decoration (fig. 897a). Fragment of roof structure, but too little remaining to determine its design.


a

b

Figure 897. Bakna. Pyramid temple. Fragmentary remains of northwest corner of building: a, seen from northwest; b, seen from east.

Building and Monument

Across the road from the pyramid platform just described, but still apparently in the northern part of the site, is a partly standing building that faced north. The masonry shows well-cut, faced, and fitted wall stone and well-finished semispecialized and specialized vault stone. Just west of the building, near the western edge of the terrace on which the structure rests, is an upright stone—rectangular in section, dressed on all sides but without any indication of carving—that resembles a stela. The identification is, however, by no means certain.

Northeast Building

Possibly 250 m northeast of the pyramid temple is a court with structures on its four sides, of which the one on the west is of particular interest in showing successive stages of construction. To an early building that faced east additions were made on the north, south, and west, and a second story was added. Unfortunately, this large building was examined in a most cursory manner because our planned return to the structure did not materialize.

The earliest building, a structure of several rooms, showed masonry of rather small, fairly well-finished wall stone, small-stone doorjambs, and semispecialized vault stone, in other words, masonry typical of a style seen frequently in this area. The northern addition to this building featured a columnar doorway, full-width jamb stones, and more specialized vault stone. The two doorway columns, which have fallen, are sculptured, and there are traces of painting on the soffits of the vault and on the lower walls of the room. The western addition to the early structure seems to have supported the now-fallen second story. Banded split columns from some facade were in the debris.

Southeast Court

About 200 m southeast of the pyramid temple, and in the more southern cluster of building remains, is a small court with structures on its east and west sides. Near the middle of the court is a plain cylindrical stone altar and the remains of a caved-in chultun.

WEST BUILDING

This is a structure of four rooms with a plan like that seen in the South Building of the Main Group at Kanki (see fig. 885a), a building that it resembles in many respects. The rather heavy walls, small, fairly well-cut, faced, and fitted wall stone, small-stone doorjambs, little rectangular windows or ventilators, and stepped rough-slab vaulting parallel the construction of the Kanki building. The vaults of the Bakna structure rise in five steps (fig. 898b) and step inward at the ends of the rooms, which is somewhat different from the Kanki example, but the workmanship is much like that seen in the other building. A section of medial molding, apparently made of a single rectangular member (fig. 898a), is in position on the west side of the building. There is no evidence of any roof structure.

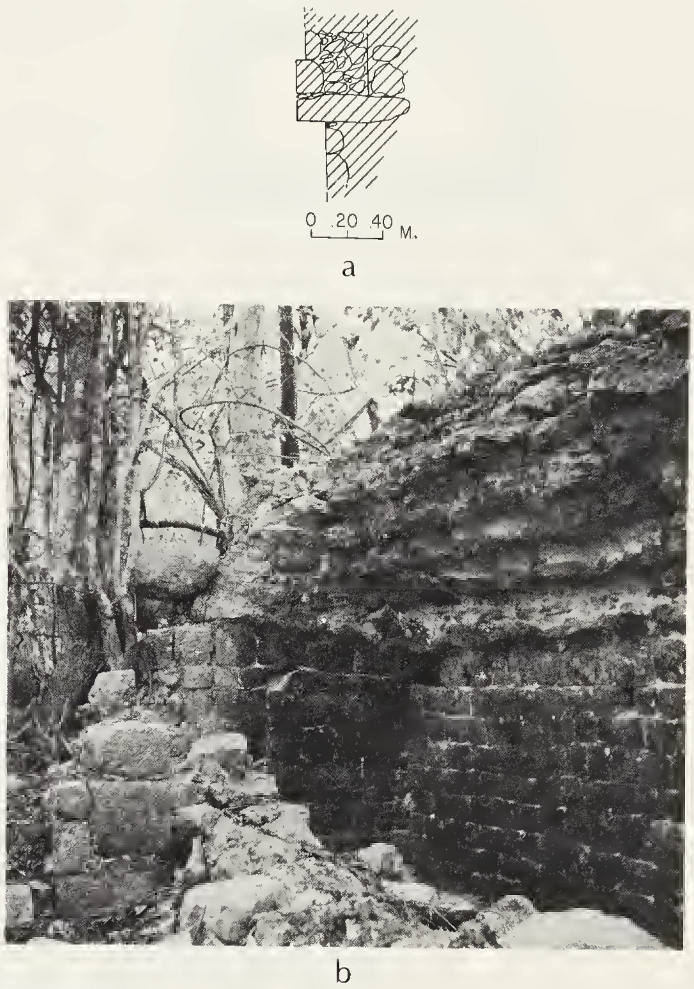


Figure 898. Bakna, Southeast Court, West Building: a, section of medial molding; b, remains of north room, looking southeast, and showing wall and vault masonry, and fragment of doorjamb (left foreground).

EAST BUILDING

Single-room building that rests on low platform and faces west on court. Platform, which is about 1 m high, is ascended by broad stairway of 3 or 4 steps that rise from court level to ample terrace in front of building. Stair risers built of large, fairly well-faced blocks of stone, and treads are .75–.90 m deep.

SUPERSTRUCTURE

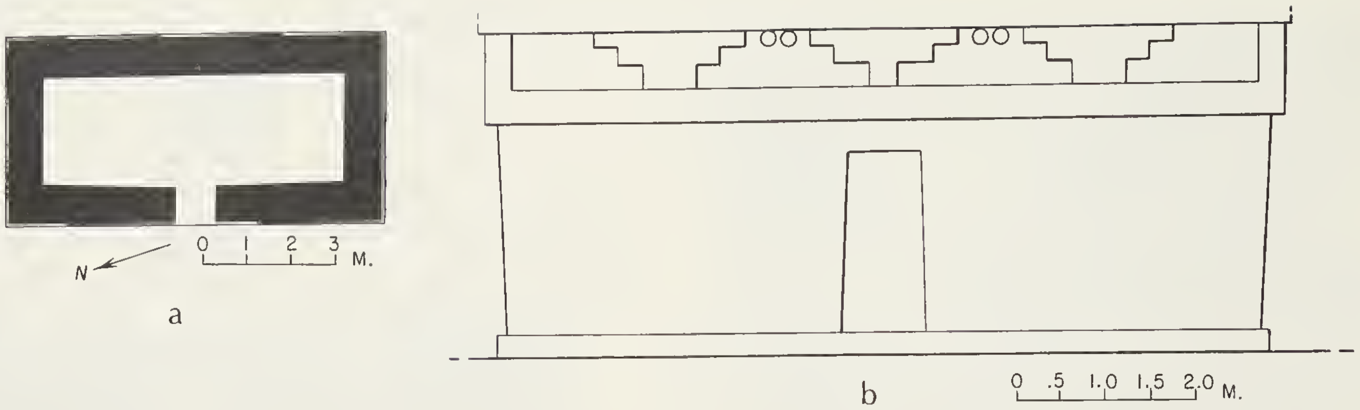
Plan. See figure 899a.

Elevation. See figure 899b.

Base Molding. Single course of roughly dressed stone .25 m high and projecting .08 m from wall above.

Walls. Heavy walls, .75–.85 m thick, for so small a structure. Walls carry negative batter and thus are thicker below medial molding than at base.

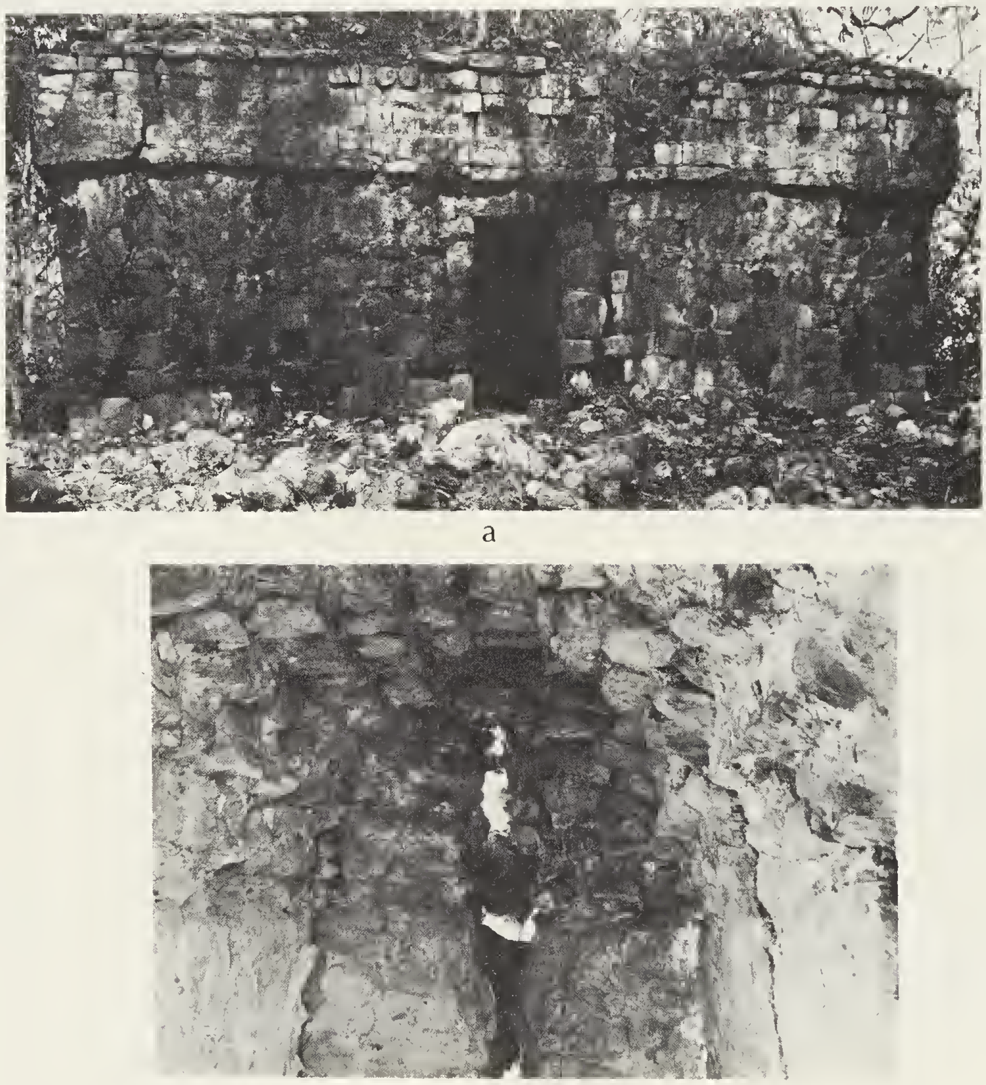
Exterior facing of roughly dressed and fitted blocks that are relatively thick and more deeply tenoned into hearting than average wall stone (fig. 900a). Abundant use of spalls between stones. Interior facing even rougher than exterior (fig. 900b). Wall masonry similar to that seen at Oxkintok (e.g., see pp. 295, 307). Walls are capped with



a

b

Figure 899. Bakna, Southeast Court, East Building: a, plan; b, west elevation.



a

b

Figure 900. Bakna, Southeast Court, East Building: a, view from west; b, interior, looking north.

layer of plaster just under medial molding, a common practice in Puuc construction.

Doorway. Opening narrows from bottom to top and is about .13 m narrower at lintel than at floor (fig. 899b). Jambs built of cornerstones and wall stones (fig. 900a). Stone lintel.

Wall Openings and Depressions. Small rectangular window in each end wall below medial molding and two such windows in rear (east) wall. Typical two-hole cordholders on inner wall at each side of doorway.

Vault and Beams. Vault of six steps formed by large heavy rough slabs, deeply set (fig. 900b). Ends of stones roughly trimmed, but vaulting is probably crudest seen anywhere in Puuc. Much chinking between stones. Ends of vault step inward like sides. Capstones are rough thick slabs similar to vault stones.

Sockets indicating five transverse beams: one at each end of room just below spring of vault, one at center of room in spring course, two in fifth or next to top course.

Moldings. Heavy rectangular medial molding, built of two courses of stone (figs. 899b, 900a). Only first course of cornice molding preserved. Molding probably was like medial molding with vertical inset coping course above it.

Decoration. Upper facade or entablature framed by medial and cornice moldings and by vertical raised pieces at corners of building (figs. 899b, 900a). Within the panel thus formed is the raised design of three inverted stepped pyramids, separated by a pair of circles. Same arrangement on rear facade. Ends of building each carry a single inverted pyramid. Design is not uncommon in Campeche ruins we have described and is associated with moderately well-dressed wall stone, small-stone doorjamb, and rectangular-molding style of construction.

Traces of red paint on exterior of structure, particularly well preserved beneath medial molding on east side.

FURTHER SOUTH AND SOUTHEAST GROUPS

About 50 m south of the Southeast Court is a group of mostly fallen buildings of which one showed the remains of a four-column doorway facing north. Wall stone is well cut, faced, and fitted, jamb stones are full width, vault stones are well cut and finished and specialized in shape.

East and northeast of this group extend a large number of small courts and low platforms that may represent the remains of dwellings.

MISCELLANEOUS NOTES

Although there is not much standing architecture at Bakna, there seems to have been an extraordinarily full range of styles of construction, judging from the debris of buildings. The predominant style appears to have employed well-cut and faced wall stone, full-width jamb stones, and well-finished semispecialized and specialized vault stone. Doorway columns were much used and often were made of three or more drums, in contrast to columns of a single stone shaft or of two drums generally used in Puuc buildings. One doorway seen, for example, employed drums .34–.51 m in height and .50 m in diameter. In common with nearly all ruins in the Campeche area, no cut-stone elements from facade masks were seen.

A number of the usual plain, monolithic, cylindrical altars were observed, but not drawn or measured, and one carved rectangular altar with a three-member molding around the top (cf. fig. 890b, d) was seen.

Acanmul

ETYMOLOGY

Roys (personal communication) says that besides its several Motul Dictionary definitions (Martinez 1929, p. 66), *acan* is a parasite, probably *Orobanche* (and see Roys 1931, p. 213, *acam*); *mul* is a mound. Variant spelling: Acamul, Zacamul.

SITUATION

Approximately 7 km east-southeast of the town of Hampolol and 20 km or a little more east-northeast of the city of Campeche.

TOPOGRAPHY

Northeast of the town of Hampolol there is a flat valley or plain, possibly 5 km wide, that forms a gap in the chain of hills that runs from Maxcanu to Campeche. The valley rises imperceptibly to the east-southeast and is drained by an arroyo or creek—known now as the Rio Verde but in early Colonial times as the Rio Homtun (Roys 1957, map 2)—that runs west-northwest to the ocean, passing 1.5 km northeast of Hampolol. The arroyo is little more than a narrow muddy swamp in the dry season but reportedly is flooded to a depth of 2 m during the rains. The site of Acanmul is located on the flat plain approximately at the head of the arroyo.

WATER SUPPLY

Almost certainly ample natural surface water at all times except at height of dry season. Water table in dry season only 3–4 m below surface and may well have been reached by ancient wells. Our guide reported a well, which we did not see, and which may be either ancient or modern. No chultuns observed during our inspection of the ruins. Modern well at Hacienda Yaxcab about 3 km west-southwest of Acanmul.

MAP

None other than present sketch plan (fig. 901), which has been drawn from memory and is to be used primarily as a guide to description of ruins and not to be considered true plan of site.

SIZE

Our exploration of the ruins was too limited to determine their extent. Judging by the number and size of structures observed, the site appears to be large relative to other sites visited in the area. Marquina et al. (1939, p. 13) say there are 18 high mounds and 28 low ones. Some of the pyramidal structures are 10 m, 12 m, or even 15 m in height.

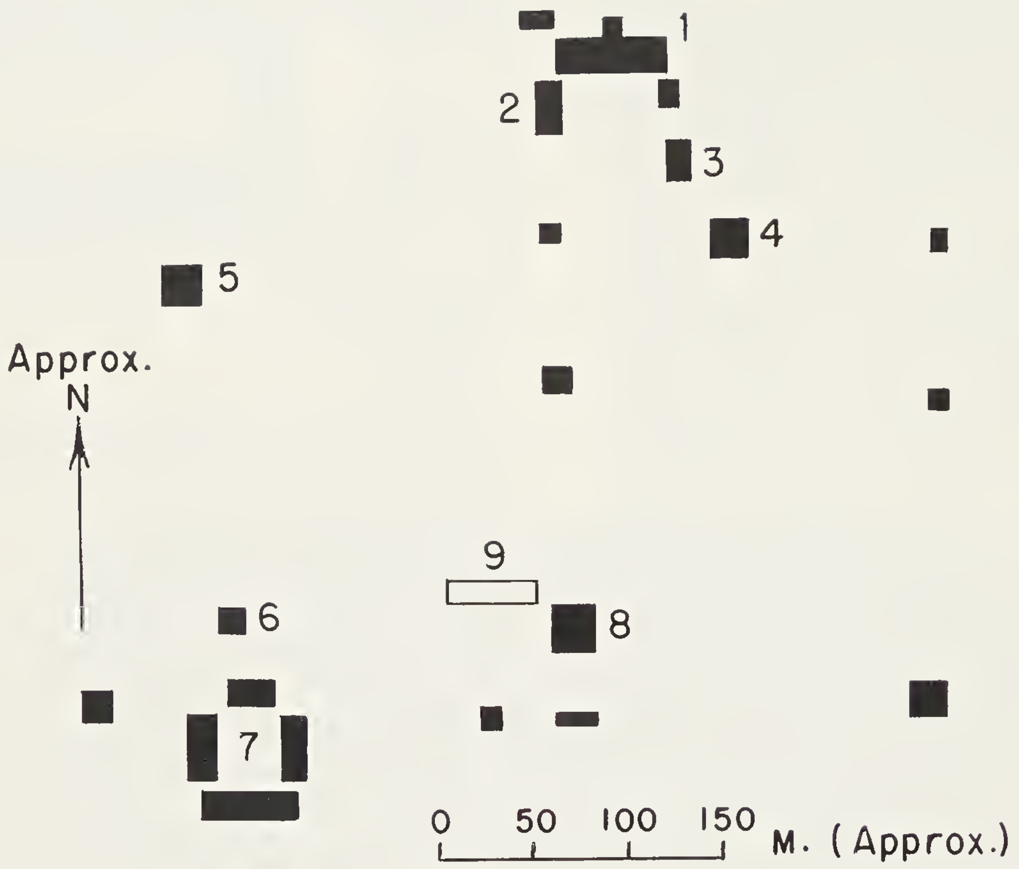


Figure 901. Acanmul. Sketch plan of ruins.

CIVIC PLAN

Not known, owing to lack of mapping and of intensive exploration. At time of our visit site was under dense growth of high coarse grass that obscured all but the more prominent structures, a handicap that was magnified by the generally ruinous condition of the remains. The ruins are striking in the number of pyramidal substructures, an architectural form that is generally not prominent in Puuc ruins. There are at least ten pyramids at Acanmul and quite possibly twice that number. The common arrangement of structures around courts is certainly present, and there are very probably large plazas, but these are features that tended to be obscured by the rank vegetation and I cannot speak with any assurance of their frequency or of the overall plan of the site. The sketch map, moreover, is far too rough to help in this respect. It serves mainly as a guide to the description of the site. In the light of our present knowledge, or lack of it, probably the most accurate statement that can be made about Acanmul is that it is strikingly different from virtually all sites covered in this study, Oxkintok being the nearest to it.

Structure 1

(Palace)

This structure marks the northern limits of our exploration. It lies on the northern side of a court with pyramidal structures at the east and west (fig. 901). Structure 1 is large, high, and badly fallen, and clearly represents a number of stages of construction. Several buried buildings are partly exposed on the north slope, and a wing extends northward from the base of the structure on that side. Partly exposed rooms are seen about halfway up the structure on the south side, and there are the remains of what were probably three separate buildings on the summit.

In the northern wing may be seen two considerably fallen rooms, that on the east side showing finely cut, faced, and fitted wall stone and highly specialized vault stone, that on the west showing less well-finished wall stone and less specialized vault stone. Elements of banded split columns were found in debris from the north side of Structure 1, and in the court west of the northern wing was a rectangular altar (fig. 902), .53 m high, .40 m wide, .36 m thick, carved on three sides with a three-member molding, sunken panels, and a simple rectangular base. The corners of the shaft between the base and molding are rounded. The fourth side is dressed but plain.

The partly exposed rooms on the south side of Structure 1 have wall masonry of moderately well-cut, faced, and fitted stone, and similarly finished vault stone that for the most part is not highly specialized (fig. 903b). Vaults are typically of Puuc design with offsets at the level of the spring on all sides of the room and corbeled courses under the capstones (fig. 903a). Transverse beams had spanned

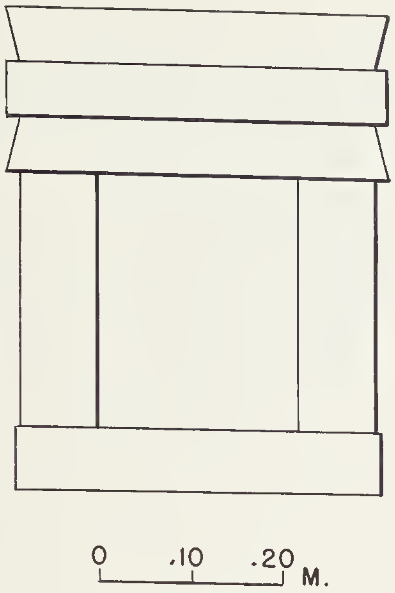


Figure 902: Acanmul, Structure 1. Altar in northwest court.

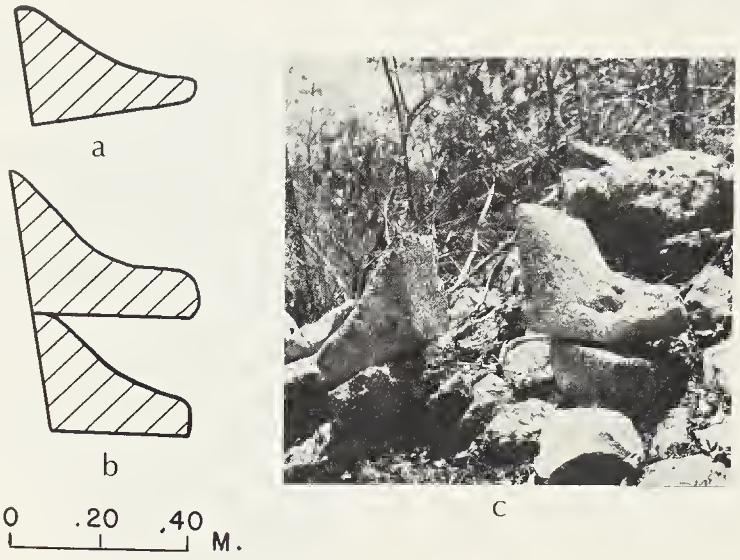


Figure 904. Acanmul, Structure 1. Vault stones from summit buildings: a, typical stone from west building; b, typical stones from center building; c, fallen stones from center building.

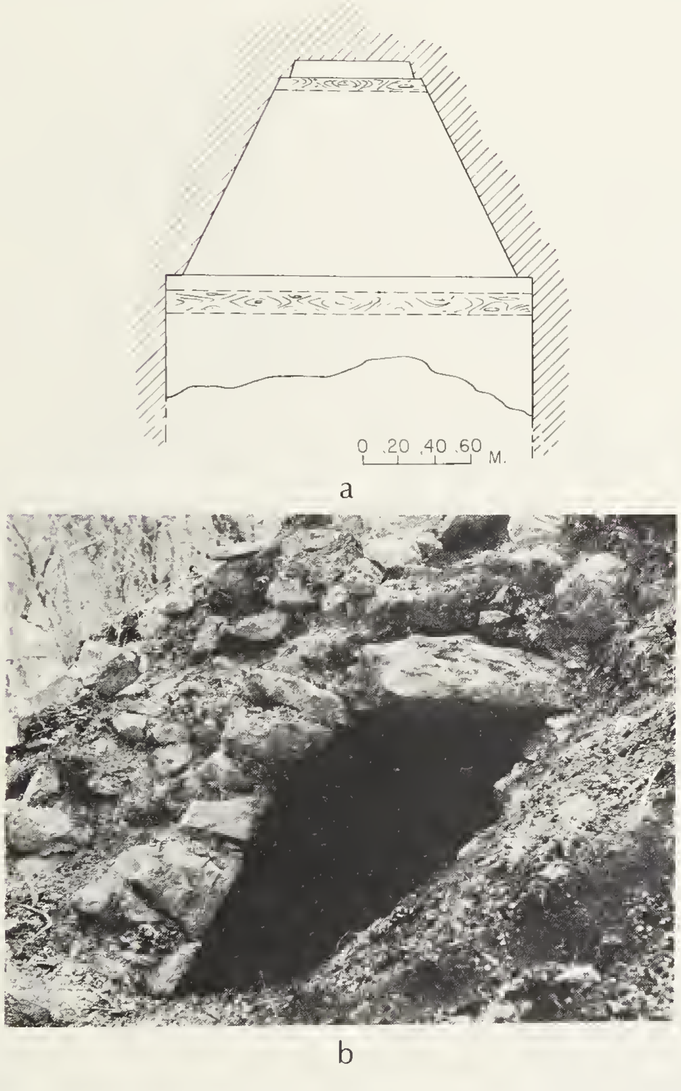


Figure 903. Acanmul, Structure 1, southeast room: a, transverse section; b, vault masonry, looking west.

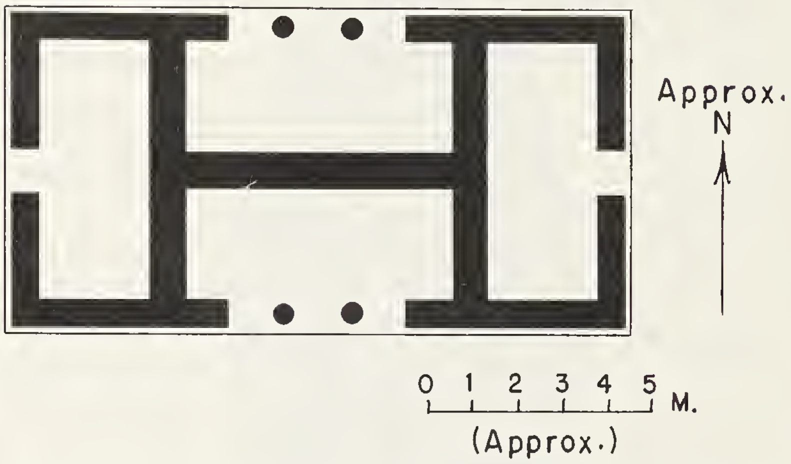


Figure 905. Acanmul, Structure 1. Sketch plan of western summit building.

the room just below the spring of the vault and below the corbels under the capstone. The more eastern of these rooms, at the southeast corner of the building, carries traces of wall painting in red, black, blue, and green. There appears to have been a band of solid red beneath the offset at the spring of the vault.

There are the remains of what seem to have been three separate buildings, all badly fallen, on the uppermost terrace of Structure 1. The heap of debris that once was the eastern building offers little or no information without excavation. The central building is in nearly as bad condition, but it can be seen from the fallen stone that the masonry was of the finest quality. Wall stone was large and finely cut; jamb stones were equally fine and of specialized form, with a low rounded ridge running down the back. Vault stone showed extreme specialization and the buried surfaces were almost as well finished as the exposed faces (fig. 904b, c).

The western building, the least destroyed of the three, appears to have consisted of four rooms arranged as shown here (fig. 905). Outer walls are .60 m thick at the doorways; the medial wall and interior transverse walls are heavier. Doorjambs are built of well-shaped and dressed, full-width stones; the doorway columns are .45 m in diameter. Wall stone is well cut, faced, and fitted; vault stones are finely dressed and specialized (fig. 904a).

Close to the southwest corner of Structure 1 is a fallen building, in the east entrance of which may be seen two sculptured rectangular pillars about .50 m on a side, erect but mostly buried beneath debris. The carving on the inner faces (i.e., the sides facing each other) is too weathered to make out the subject, that on the outer faces, which are mostly buried, shows the lower leg and talons of a bird or some saurian monster. The front faces of the pillars carry a semicylindrical projection, partly buried, the rear faces a simple projecting vertical band at the center.

Structures 2–6

Structure 2, just south of the last building described and of the southwest corner of Structure 1 (fig. 901), is a high terraced pyramidal mound with no remains of a superstructure discernible. The terrace walls are built of rough blocks, seemingly dry laid (fig. 906), but it may be that the customary mortar between stones has washed out over the years.

Structure 3 is a pyramid with a fallen vaulted building on its summit. The masonry of the temple building shows moderately well-cut and faced stone.

Structure 4 is a large pyramid with the remains of a stairway on its west side and of a temple at the top.

Structure 5 is one of the largest, if not the largest, pyramid at Acanmul. Its crowning temple is totally fallen.

Structure 6 is a pyramid, but it is now little more than a high mound of debris with no masonry visible.

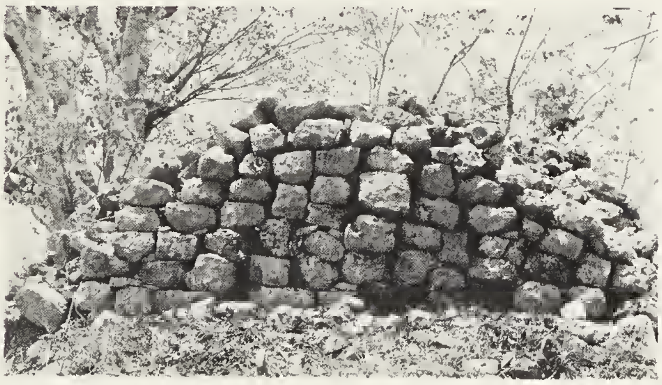


Figure 906. Acanmul, Structure 2. Masonry of terrace wall, looking south.

Court 7

This enclosed court just south of Structure 6 is formed by pyramid temples on all four sides. All the temple buildings are fallen. In the debris of the western structure were observed elements of banded split columns.

Structures 8, 9

About 300 m south of Structure 1 is a large pyramid temple, Structure 8, that faces west on a level court or terrace with the totally fallen remains of Structure 9 on its north side (fig. 901). Sculptures M1–3 (see Miscellaneous Sculpture, below) were found in this court. The few wall stones seen in the debris of the temple building that had surmounted Structure 8 were moderately well cut and faced, comparable to the masonry seen at Structure 3.

Structure 9, which seems to have faced south on the court of Structure 8, is noteworthy for the large number of columns, both plain and sculptured, along the front of the building. Several plain columns remain standing, apparently still *in situ,* but the majority are fallen. Ten plain columns, running 1.71–1.78 m in height and .66–.70 m in diameter, were counted. These shafts carried a clear entasis (fig. 907a). Five sculptured columns, all but one badly

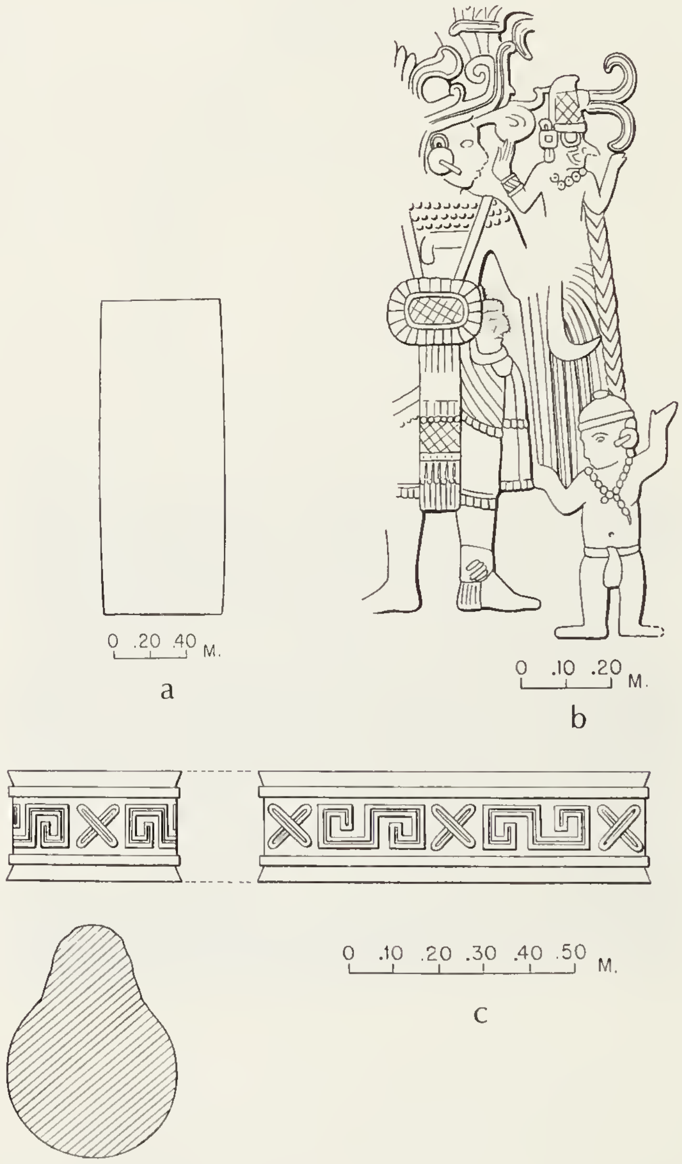


Figure 907. Acanmul, Structure 9: a, profile of column shaft; b, bas-relief carving on column; c, band element, apparently from facade column.

burned or broken, were seen. The one column whose carving is moderately well preserved measures 1.53 m in height by .58 m in diameter. The bas-relief carving, which covers about half the circumference of the column, shows an elaborately costumed human figure, apparently holding a manikin scepter, and a small subsidiary figure at the feet of the principal figure (fig. 907b; and see Proskouriakoff 1950, fig. 100c). The sculpture is considerably eroded at places but can for the most part be made out (see ibid., p. 167, for a discussion of the carving). This piece is now in the Archaeological, Ethnological, and Historical Museum of Campeche (see Pavon 1942, p. 38, no. 70). There were undoubtedly other columns, hidden beneath the debris of the fallen building or concealed by the tall grass that covered the site, but the 15 mentioned here are all that we saw. Lying with the columns in front of the building was what seemed to be the band element, decorated with a fret and X design (fig. 907c) from a banded facade column.

MISCELLANEOUS NOTES

Although no moldings were seen in place, finely cut and beveled molding stones were observed in the debris of Structure 1. No cut-stone elements of facade masks were seen. A stone (stela or altar?) carved with hieroglyphs is reportedly at the site but was not found by us. Typical plain monolithic altars in the shape of an inverted truncated cone were seen but not recorded.

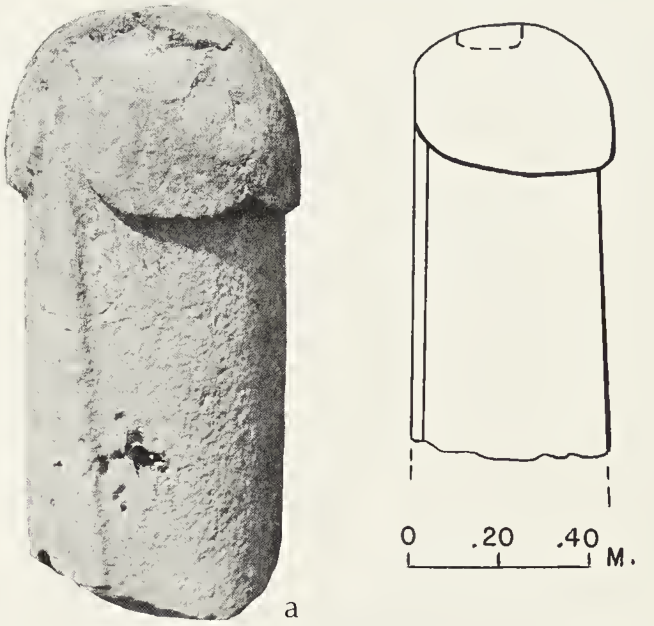
Just west of the ruins we observed what seemed to be an ancient causeway *(sacbe).* A small group of ruins was passed about 2 km southwest of Acanumul.

MISCELLANEOUS SCULPTURE

M1. Stone phallus (fig. 908a). Maximum height .96 m, diameter at base .44 m. Found at center and foot of stairway on west side of Structure 8. Piece is now in Museum of Archaeology, Ethnology, and History of Campeche (see Pavon 1942, p. 39, no. 85). Sculpture was found standing upright but is broken at base and undoubtedly was not *in situ.*

M2. Squat human figure of stone (fig. 908b). Height .80 m, maximum width .54 m. Found in court of Structures 8 and 9. Specimen is now in Museum of Archaeology, Ethnology, and History of Campeche (see Pavon 1942, p. 39, no. 87). Badly burned and weathered sculpture that is somewhat similar to figures seen at Xcalumkin (M2, 3; see p. 454, above).

M3. Squat human figure of stone. Measurements not recorded. Found in court of Structures 8 and 9. Sculpture like M2 but even more badly burned, weathered, and broken.



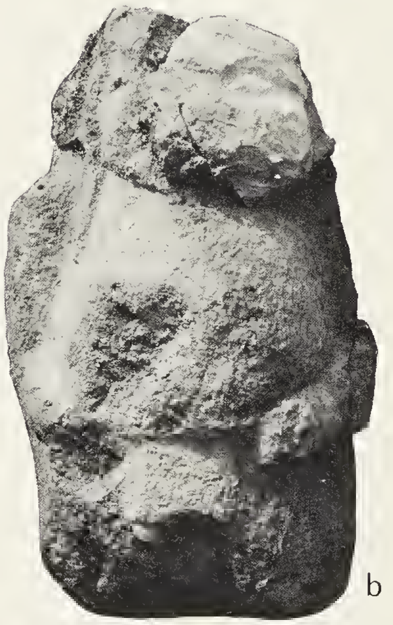


Figure 908. Acanmul. Miscellaneous sculpture: a, M1, stone phallus; b, M2, squat human figure of stone.

Other Sites

Pomuch

(Pokmuch, Tixpokmuch

Town on railroad that runs from Maxcanu to Campeche along western foot of Puuc hills. Pomuch is 6 km southwest of Hecelchakan (see p. 501, above) and 49 km northeast of Campeche.

Like Becal, Calkini, Dzitbalche, and Hecelchakan (see pp. 500–501, above), Pomuch, or Pokmuch, was a pre-Conquest settlement of the southern Ah Canul (see Roys 1957, p. 25). The town shows many signs of an ancient occupation, although most of the remains seem to be of Puuc rather than of Ah Canul times. A group of low mounds a short distance northwest of the railroad station has apparently served as a quarry to provide building stone for the town for centuries, and no standing masonry is visible. A few moderately well-cut and faced wall stone and some semispecialized vault stone were seen, and a chultun was observed. A similar group of mounds lies just south of the town near the cemetery.

Cut stones from the ruins are seen on all sides in Pomuch. The station platform and the sidewalks of the town are paved with ancient stone. Numerous column shafts and cylindrical altars are placed at corners of buildings and a large flatly rounded column shaft stands in the center of the plaza. Several carved stones were photographed and measured:

M1. Stone carved in bas-relief (fig. 909a). Height .23 m, width .25 m. Used as paving stone in sidewalk in front of house one block south of southeast corner of town plaza. Stone is now in Museum of Archaeology, Ethnology, and History of Campeche. Hieroglyph with plain border at each side. Seems to have formed part of vertical band of glyphs.

M2. Stone with crudely incised figure of monkey (fig. 909b). Maximum height .47 m, maximum width .36 m. Used as paving block in sidewalk. Stone reputedly comes from ruins of Kanalku or Xkastun.

M3. Stone incised with plait or mat pattern (fig. 909d). Maximum length .73 m, maximum width .41 m, maximum thickness .12 m. In backyard of private house. Apparently a capstone with design similar to that seen at Xcochkax (cf. fig. 653b).

M4. Element from banded facade column (fig. 909c). Height .24 m, diameter .22 m. Found in backyard of private house. Stone has tenon at rear and seems quite clearly to be band element from split-column facade decoration.

REFERENCES

Marquina et al. (1939, p. 19) and Muller (1960, p. 41) list an unpublished report by Escalona Ramos that I have not seen.

San Pablo, near Pomuch

About 1.5 km south by east of Pomuch. The ruins take their name from the abandoned hacienda of San Pablo. Small group of mounds around a court. All buildings stripped of facing stone, presumably for use in hacienda and in town. A few well-cut and dressed wall stone and fairly specialized vault stone seen. Several chultuns among ruins.

REFERENCES

Marquina et al. (1939, p. 19) and Muller (1960, p. 44) cite an unpublished report by Escalona Ramos that I have not seen.

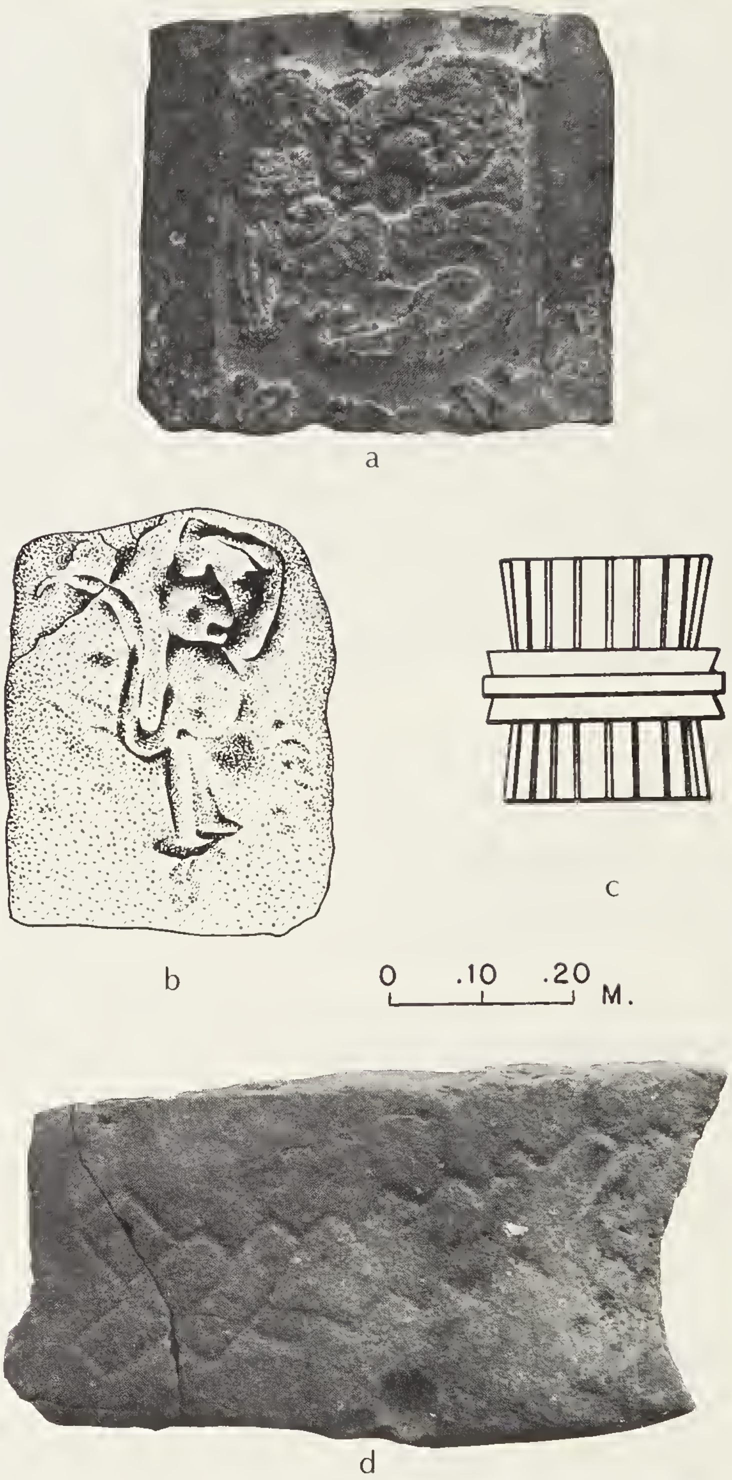


Figure 909. Pomuch. Miscellaneous sculpture: a, M1, hieroglyph carved in stone; b, M2, figure of monkey incised in stone; c, M4, band element from split column; d, M3, plait design incised in stone.

Tenabo
(Tahnab)

Town on railroad 18 km southwest of Hecelchakan and 37 km northeast of Campeche. Another pre-Conquest settlement of the southern Ah Canul (see Roys 1957, p. 25). Few low mounds on northern outskirts of town and usual large amount of ancient stone in sidewalks and buildings. Some particularly large column shafts and cylindrical altars.

Calakmul, near Tenabo

(Caalotmul)

Eleven to 12 km southwest of Tenabo. Numerous mounds, some fairly large, that stretch for over a kilometer on each side of the railroad. Not visited and seen only from train. No standing masonry observed.

Cansacbe

(Kanzacbe)

Two to 3 km northeast of Hampolol and just north of Rio Verde (see Acanmul, p. 537, above).

Large number of mounds that run for 1 km along west side of rail line. Mounds near railroad thoroughly plundered of stone. Several closed courts remain, and moderately well-cut and faced wall stone and specialized vault stone were seen in the debris of one mound. A sculptured doorway column, reputedly from Cansacbe, is now in the Museum of Archaeology, Ethnology, and History of Campeche. See Pavon 1942 (p. 22, no. 12) for measurements and description of column, and see Proskouriakoff 1950 (fig. 99a, and p. 167) for illustration and discussion of sculpture.

Hampolol

Village on railroad 40 km southwest of Hecelchakan and 15 km northeast of Campeche. Although ancient cut stone is seen in the platform of the railroad station and in the village, I suspect that the archaeological site reported by Muller (1960, p. 33) and shown on the Tulane University (1940) map is actually Cansacbe (see above).

Kanchi

Some 4–5 km south-southwest of Main Group of Kanki, 3–4 km south-southwest of Cacabbeec, and approximately 3 km north-northwest of Maioch.

Two small groups of badly fallen structures about 200 m apart. North Group located on savanna and consists of buildings on north, south, and west sides of small court. North and west structures are small pyramid temples, the superstructures completely fallen. In debris of south building were moderately well-cut and faced wall stone, semispecialized vault stone, elements of facade columns, and drums, band elements, and a capital from doorway columns (fig. 910; and cf. Xcochkax, fig. 646a, and Naox, fig. 663). Chultuns were observed in the court and west of the group.

South Group located on hilltop about 200 m southeast of North Group. Court with buildings on three sides. Fragments of masonry in north building show small, moderately well-cut, faced, and fitted wall stone—of better quality on exterior surfaces than interior—and small, somewhat specialized vault stone. The debris of the east and south buildings includes normal-sized, well-cut and dressed wall stone, full-width jamb stones, and semispecialized and specialized vault stone. A number of chultuns were seen.

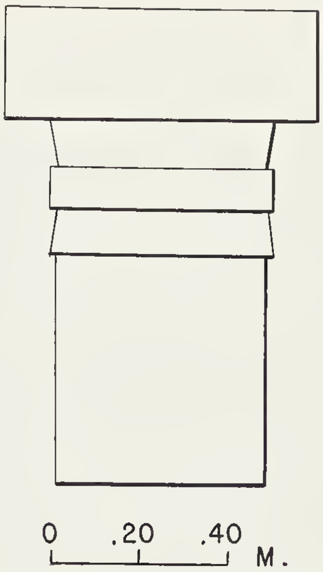


Figure 910. Kanchi, North Group, South Building. Restored elevation of fallen elements from doorway column.

Chilib

(Chilibi)

Approximately 10 km south-southwest of Kanki and 15 km east of Acanmul.

Ruins take their name from Hacienda Chilib. Site has all but been obliterated by robbing of stone to build huge hacienda. Only few low mounds and platforms remain east of hacienda buildings, and no standing masonry.

About 2 km north-northeast of Chilib, just west of road that approaches hacienda from north, is fair-sized group of mounds, also badly plundered for building stone. Among a number of low mounds and platforms is a small pyramid that supports the fragmentary remains of a superstructure. Small, moderately well-cut, faced, and fitted wall stone, small-stone doorjambs, and a well-cut and dressed lintel were seen. The usual number of chultuns were also observed.

There are three pieces of sculpture in the museum in Merida attributed to Chilib:

M1. Part of sculptured column (fig. 911). Height .80 m, diameter .50 m. In Museum of Archaeology, Merida, Yucatan.

Appears to be lower half of doorway column carved with double column of glyphs, the upper glyphs badly broken. Museum description reads: "Fragment of stone column. Approximately .50 m in diameter, .80 m high, with hieroglyphic inscriptions in a vertical band of two columns .39 m wide. Hacienda Chilib, Campeche."

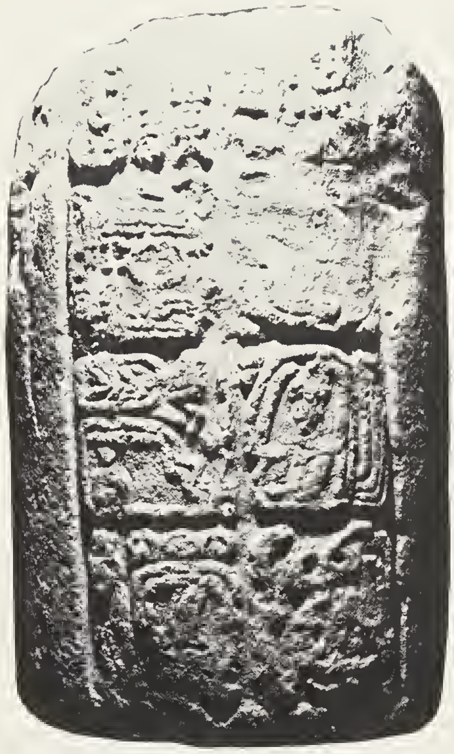


Figure 911. Chilib. Miscellaneous sculpture, M1, part of column sculptured with hieroglyphs.

M2. Sculptured doorway column (see Proskouriakoff 1950, fig. 100b; 1951, fig. 5a). Height 1.45 m, diameter .45 m. In Museum of Archaeology, Merida, Yucatan.

Low-relief carving of human figure with elaborate headdress and necklace with bar pendant. Considerably weathered. Museum description reads: "Monolithic column with low relief human figure with long hair gathered in a bunch and a diadem of serpents. Badly damaged. Approximate height 1.50 m, maximum diameter at the center .48 m. Hacienda Chilib, Campeche."

See Proskouriakoff 1950 (p. 167) and 1951 (p. 115) for discussion of sculpture.

M3. Sculptured doorway column. Height 1.55 m, diameter .55 m. In Museum of Archaeology, Merida, Yucatan.

Rather crude and badly weathered, low-relief carving of human figure with javelin in right hand. Indication of headdress. Face obliterated. Sculpture somewhat similar to M2 (see above).

Cozumel Stela. Sculptured doorjamb (see Lothrop 1924, fig. 21). Height 1.55 m, width .48 m, thickness at edge .13 m. In Museum of Archaeology, Merida, Yucatan.

Proskouriakoff (1950, p. 157) has called attention to the resemblance of this sculpture to Sculpture M2 from Chilib (see above). I agree with her suggestion that the piece is most probably a doorjamb, the longitudinal ridge down the unfinished back of the stone suggesting that identification, and agree further that the style of the carving indicates a provenience of Chilib or that general region.

Bohola

Approximately 8 km southeast of Chilib and the same distance or more south of Maioch. The site takes its name from Hacienda Bohola. Like Chilib (see above) little remains of the ruins because of the robbing of stone for the hacienda buildings, which show vast quantities of ancient stone, most of it well cut and dressed. Three pieces that carried fragmentary designs carved in low relief were seen in the paving at the hacienda. The first stone, which shows a simple twisted-rope pattern (fig. 912a), measures .45 m by .34 m. The second, an oddly shaped stone with channels cut to form two rectangular panels (fig. 912b), is .30 m by .35 m. The third carries a curvilinear design (fig. 912c) and measures .29 m by .23 m.

About 2 km west of the hacienda, on the south side of the main road to Campeche, is a small group of mounds about a court. The north building had had a double-column doorway, the columns possibly being of the flatly rounded variety. The west building had very small, well-cut, faced, and fitted wall stone, small-stone doorjambs, and small, semispecialized and specialized vault stone. The south building showed normal-sized moderately well-cut, faced, and fitted wall stone and normal-sized specialized vault stone. Three chultuns were observed in the court of this group.

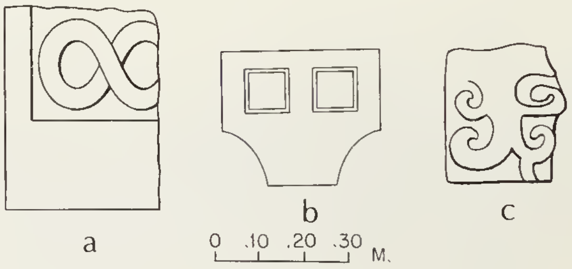


Figure 912. Bohola. Carved stones used in paving at hacienda.

Xtun
(Xtan)

Twenty to 25 km east of Campeche on highway to Hopelchen.

Marquina et al. (1939, p. 21) and Muller (1960, p. 50) report mounds. I have no other information on these ruins.

Campeche
(Campech, Canpeche, Campoche, Kinpech, Kimpech, San Lázaro)

Latitude 19°50′47″ N, longitude 90°32′14″ W (Ruz 1945, p. 109). Seaport on Bay of Campeche approximately 160 km south-southwest of the city of Merida.

Campeche was an important pre-Conquest settlement, the principal town of the ancient province of Canpech which lay immediately south of the southern

Ah Canul (Roys 1957, p. 168). The town was visited or seen by all of the early Spanish expeditions that sailed along the coasts of the Yucatan peninsula (see Tozzer 1941, pp. 10–15) and was estimated by one observer to have contained 3,000 houses. Large stone temples and imposing sculptures were particularly noted there, but in spite of the obvious importance of the pre-Conquest settlement, the modern city has obliterated virtually all traces of the ancient buildings that once existed (Ruz 1945, pp. 70–71). There are, however, a few pieces of sculpture, the provenience of which is often in doubt, that are attributed to Campeche.

M1. Stone statuette carved in round (see E.W. Andrews 1943, fig. 18b, c). Dimensions not recorded. In Regil Collection, Merida, Yucatan. Specimen reputedly comes from vicinity of city of Campeche. See Andrews 1943, pp. 82–87, for description and discussion of sculpture.

M2. Doorway column of stone carved in bas-relief (fig. 913a). See below for dimensions. In Museum of Archaeology, Merida, Yucatan.

Badly damaged human figure of which the head and face are virtually obliterated. Museum description reads: "Monolithic column with figure carved in low relief, badly defaced. Approximate height 1.56 m, approximate diameter .56 m. Provenience Campeche."

M3. Stone with fragment of glyphic inscription carved in bas-relief (fig. 913b). Height .565 m, width .275 m. In Museum of Archaeology, Ethnology, and History of Campeche. Specimen reputedly came from wall of convent adjoining San José church in Campeche.

M4. Human head with large headdress carved from stone in high relief (fig. 913c). Dimensions not recorded. In Museum of Archaeology, Ethnology, and History of Campeche. Specimen reputedly came from wall of house in Campeche.

M5. Stone sculpture in high relief of squatting human figure with face peering from bird-beak headdress (fig. 913d). Height approximately 1.20 m. In Museum of Archaeology, Ethnology, and History of Campeche. Provenience reputedly is city of Campeche.

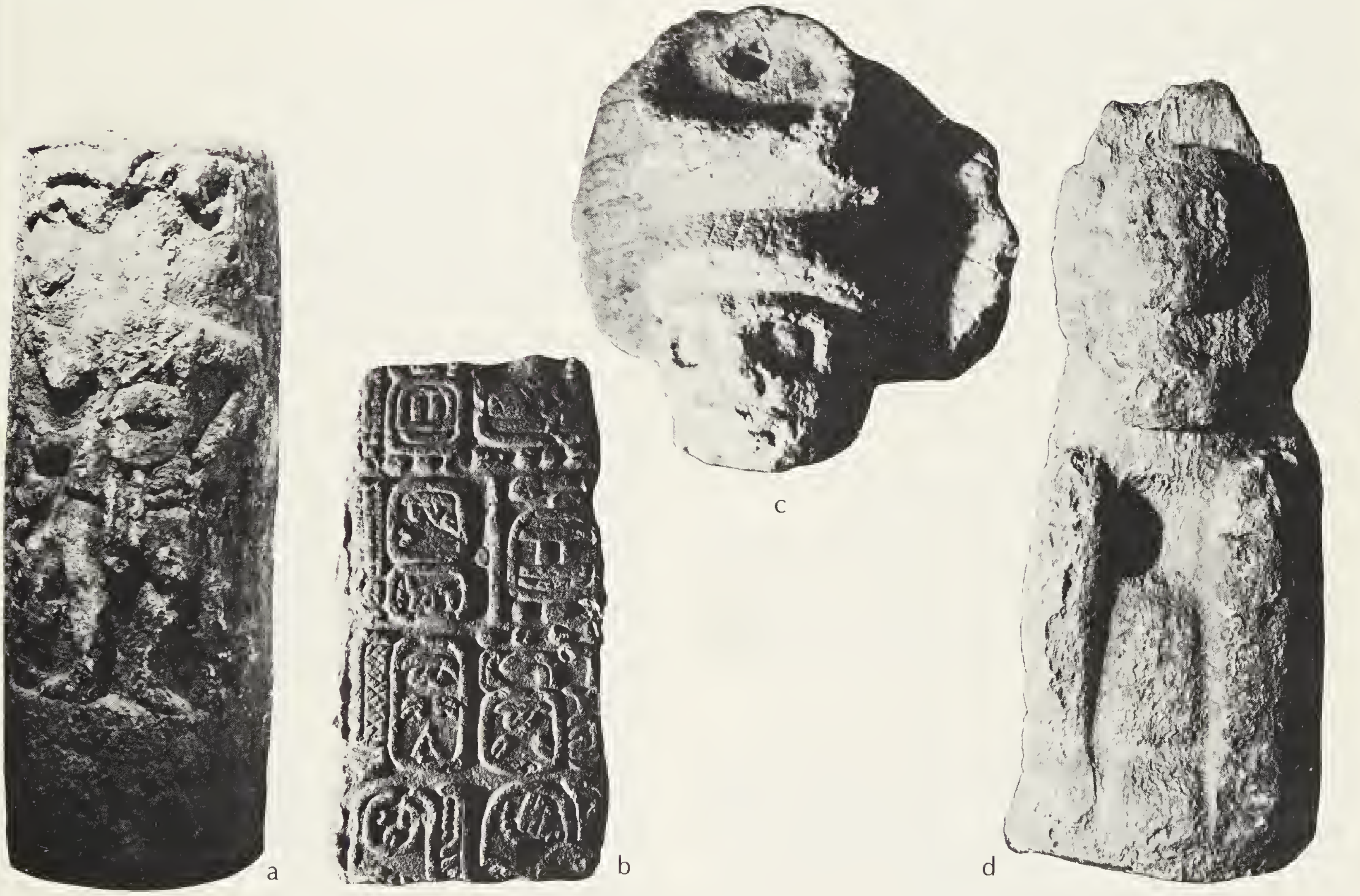


Figure 913. Campeche. Miscellaneous sculpture: a, M2, column of stone with human figure sculptured in low relief; b, M3, fragment of glyphic inscription carved on stone; c, M4, human head of stone with large headdress; d, M5, squatting human figure of stone.

8 · The Southeastern Sites

East of the area of ruins just considered and south of the Xculoc region, limited on the east by the Yucatan border, is a stretch of country of which I have only limited knowledge. It is my impression that most of the terrain is like that immediately to the west, namely, of savannas, wooded valleys, and intervening hills and ridges. Possibly somewhat different is the northeastern sector along the Yucatan border as far south as the town of Bolonchenticul, where the terrain is, I think, slightly more rugged, of steeper hills and valleys, and with less savanna, in other words more like the typical hill country on the Yucatan side of the border. It will be seen from the map (frontispiece) that the known distribution of ruins is quite sparse. This is due, I suspect, to no great amount of exploration of the region. Such sites as are known seem to present an architecture that is essentially like that of the Yucatan ruins to the northeast but that incorporates a few traits we have seen in the Campeche sites. If the southwestern part of the area were better known, I suspect the similarity to the Yucatan ruins would be less pronounced.

Halal, southeast of Xcalumkin

Halal is a fairly common place-name and there is at least one other ruin so designated. Consequently I am identifying the present site as southeast of Xcalumkin, the nearest location for which we have accurate geographical coordinates.

ETYMOLOGY

halal, reed, reed-bed, arrow (Roys 1931, p. 243; 1935, p. 9). Roys (personal communication) has written me that *halal* can either be *Phragmites communis* Trin., the reed used for arrows, or *Scirpus validus* Vahl., a bullrush used for making mats. Variant spelling: Halah.

SITUATION

Approximately 12 km southeast or south-southeast of Xcalumkin and 20 km northwest or west-northwest of the town of Bolonchenticul.

TOPOGRAPHY

Main Group, or Acropolis, located 500–600 m east of Halal aguada in savanna of Halal. Although Acropolis appears to rise from floor of savanna, it is probably built on a low natural rise. Outlying groups located on low hills and on rocky outcrops in savanna.

WATER SUPPLY

Aguada, which is rectangular in shape and suggests being partly artificial, had water in it at the time of our visit (March 1940). There was a heavy growth of reeds in the aguada that undoubtedly give the name *Halal* to the locality and the ruins. The usual chultuns were seen at the Acropolis and they are probably present in the other groups. I do not know the nearest permanent water supply, if the aguada at times dries up, but the village of Yalnon, where I assume there is a well, is reported to be about 8 km south or south-southeast of Halal.

SIZE

The Acropolis is an immense construction that towers above the savanna and dominates everything in the vicinity (fig. 914). Several smaller groups lie in the savanna to the southwest, west, and northwest, the furthest, where there is a good-sized pyramid, at a distance of maybe 1 km, and to the north is a fairly large group of 15 or more structures a little over 1 km distant. The site was not thoroughly explored and there well may be remains not seen by us.

CIVIC PLAN

Lack of any map leaves considerable doubt about the plan of the site. There is every reason to believe that the Acropolis was the civic or ceremonial center for all the ruins we observed up to a distance of 1 km or more. A causeway leaves the west side of the Acropolis in a west-northwest direction seemingly headed for a group of remains we have called the Northwest Group. In all, we observed four or more groups of structures in a general westerly direction from the Acropolis, in which direction that great structure

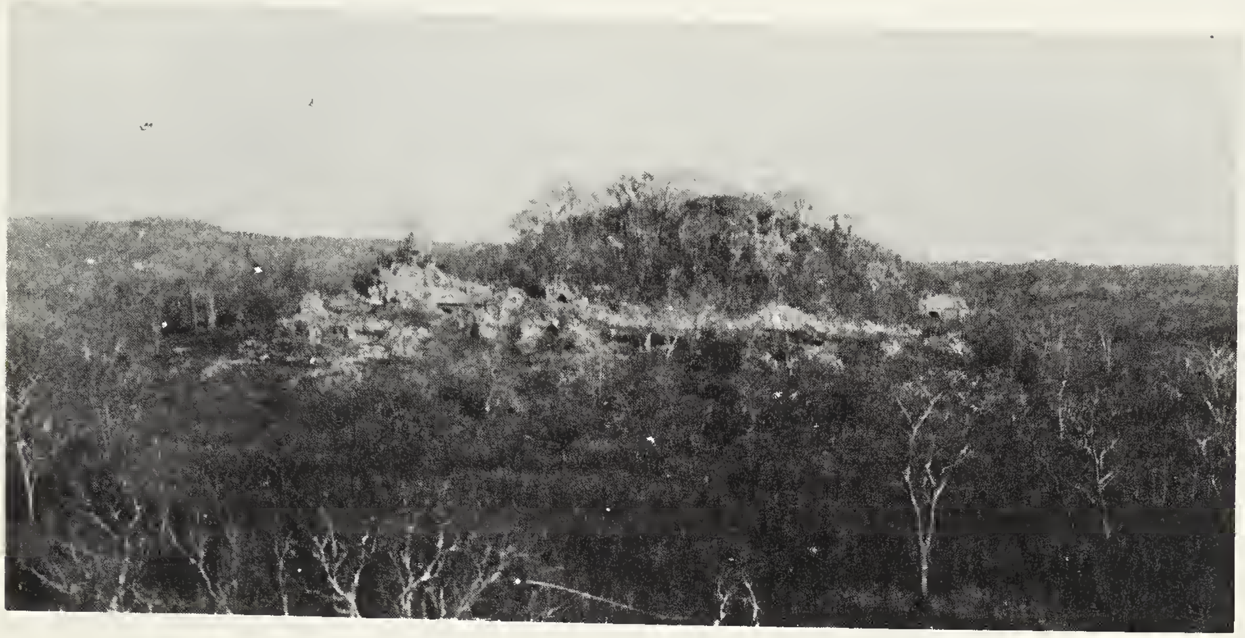


Figure 914. Halal. View of Acropolis from Northwest Group, looking east-southeast.

seems to have faced, and a fairly large group to the north, but no coherent overall plan of the site was immediately apparent.

ACROPOLIS

This huge architectural complex, which rises some 25–30 m above the savanna and measures approximately 125 m north-south by 80–90 m east-west, is an assemblage of courts and buildings on a high substructural platform that is probably the result of terracing and leveling a natural rise in the savanna. The buildings are too badly fallen to perceive the plan of the complex in any detail, but it seems very probably to have faced west, on which side there appear to be the remains of a stairway from the foot of which the previously mentioned causeway runs across the savanna toward the west-northwest. The best preserved and at the same time visible architecture is seen in the remains of first-, second-, and third-story rooms, the higher stories being hopelessly fallen, but there is good reason to believe that this great structure rose at least five stories in height. Successive phases of construction are exposed at a number of places, and it seems clear that this immense complex is the result of repeated building operations whereby old structures were added to or submerged beneath later buildings, the whole operation presumably occupying a considerable period of time.

Several of the best preserved and readily accessible rooms and some sculpture are all we were able to record in detail.

Northwest Building

This structure is near the northwest corner of the great substructural platform (figs. 914, 915). Much of its plan is not clear, but one can see a stairway on the west side that rises from the second-story terrace over a narrow vaulted passage to a third-story terrace, where a small building platform with a heavy apron molding on the sides (figs. 916, 917c) supported what was probably a temple building of one or two rooms. Beneath the temple and its building platform there seems to be solid fill as the vaulted passage under the stairway leads to no doorway and room, as might be expected. On the second-story terrace at either side of the stairway are two rooms, one behind the other, the outer western rooms entered by columnar doorways; and at the southwest corner of the southern pair of rooms are the remains of two other rooms that faced north on the second-story terrace and jutted westward at right angles to the southern pair. The last two rooms abut a badly fallen building still farther west. That is about all that can be seen of the plan of the building without excavation. The second-story rooms immediately south of the stairway are relatively well preserved and my detailed notes deal almost entirely with those rooms.

SUPERSTRUCTURE

SECOND STORY, SOUTH WING

Plan. See figure 917a.

Section. See figure 917b.

Base Molding. Single course of well-cut stone projecting .03–.04 m from wall (fig. 917b). Similar molding across rear wall of front room.

Stairway. Badly fallen stairway to third story rises over vaulted passage (fig. 917a). Secondary wall with narrow doorway at south end of passage (fig. 917b).

Floor. Normal hard plaster floor. Floor level rises to inner room (fig. 917b).

Walls. Finely cut, faced, and fitted stone on both inner and outer wall surfaces (fig. 918). Outer facing somewhat better shaped and fitted than inner.

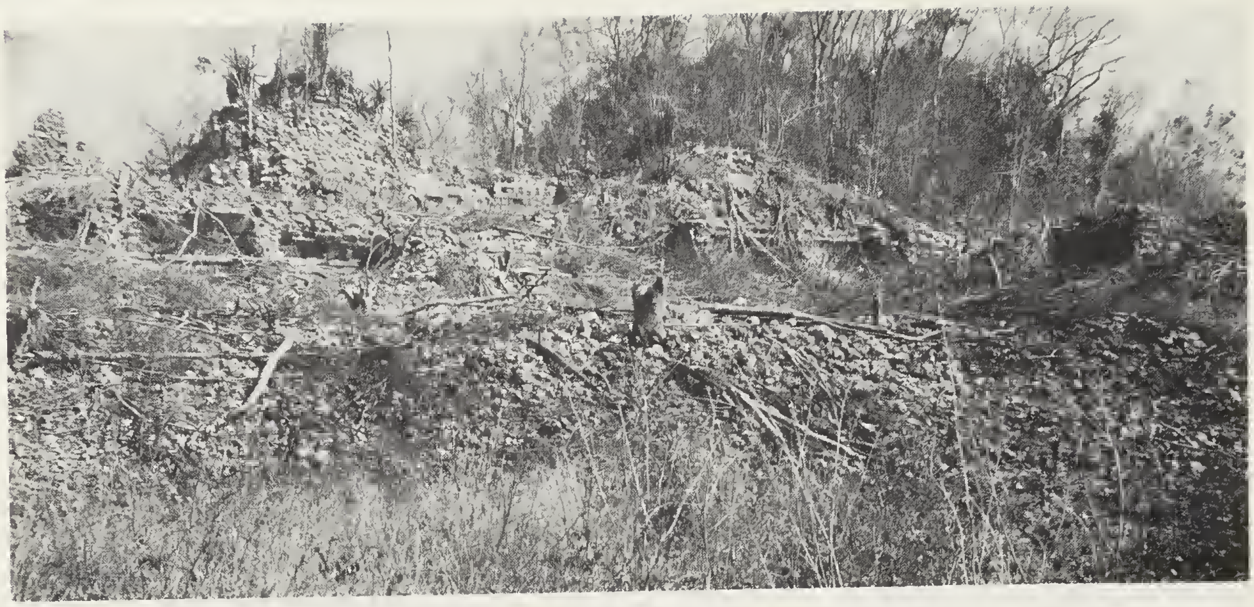


Figure 915. Halal, Acropolis. View of northwest corner, looking east-southeast, and showing Northwest Building (at left) and Main Building (at right) rising above great substructural platform.

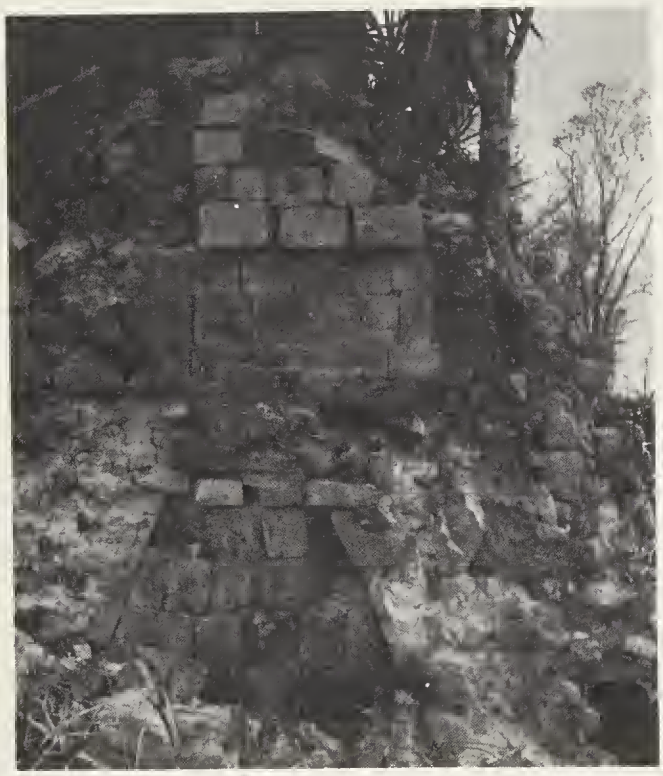


Figure 916. Halal, Acropolis, Northwest Building. Fragment of third-story building platform rising above remains of second-story vault in North Wing, looking south, and showing top of vaulted passage (lower right) under stairway.

Doorways. Multiple entrance to outer room employs columns with flatly rounded sides (figs. 917a, 918a), a type common in the Campeche ruins. Columns support rectangular capitals, and jambs, which are built of full-width stones (fig. 917b), are topped by corbels. Lintels of both inner and outer doorways are of stone.

Wall Depressions. Hemispheroid rod sockets in jambs of inner doorway (fig. 917b) and common two-hole variety of cordholders in wall of inner room at each side of doorway.

Bench. Broad bench .40 m high across north end of inner room (fig. 917).

Vaults and Beams. Flat soffit slopes in both rooms (fig. 917b). Well-cut, faced, and fitted, semispecialized vault stone (fig. 918b). Sockets of transverse beam at each end of each room just below spring of vault. Beam sockets at each end of rear room at half height of vault. Had been three beams in each room just under corbels beneath capstones.

Moldings. Medial molding of three rectangular members (fig. 917b), a common design in the Campeche ruins. Cornice molding fallen.

Roof. Some of roof surface preserved. Had been painted red. Roof cap .48 m thick from underside of capstones to upper surface of roof.

Decoration. Stones projecting from facade above columnar doorway (fig. 918a) indicate some sort of decoration but not enough left to determine its nature.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

What is probably the earliest part of the second-story construction described here is the badly fallen building at the west end of the rooms that project westward from the South Wing (see above). The intermediate rooms between that building and the South Wing are definitely secondary to the west building and seem to be contemporary with the South Wing. There is some secondary fill in the south end of the rooms in the North Wing, presumably to give added support for the third-story temple and its building platform. One supposes, but cannot be certain without excavation, that the third story is the final construction of the Northwest Building, unless the secondary wall and small doorway at the south end of the passage beneath the stairway (fig. 917) followed it.

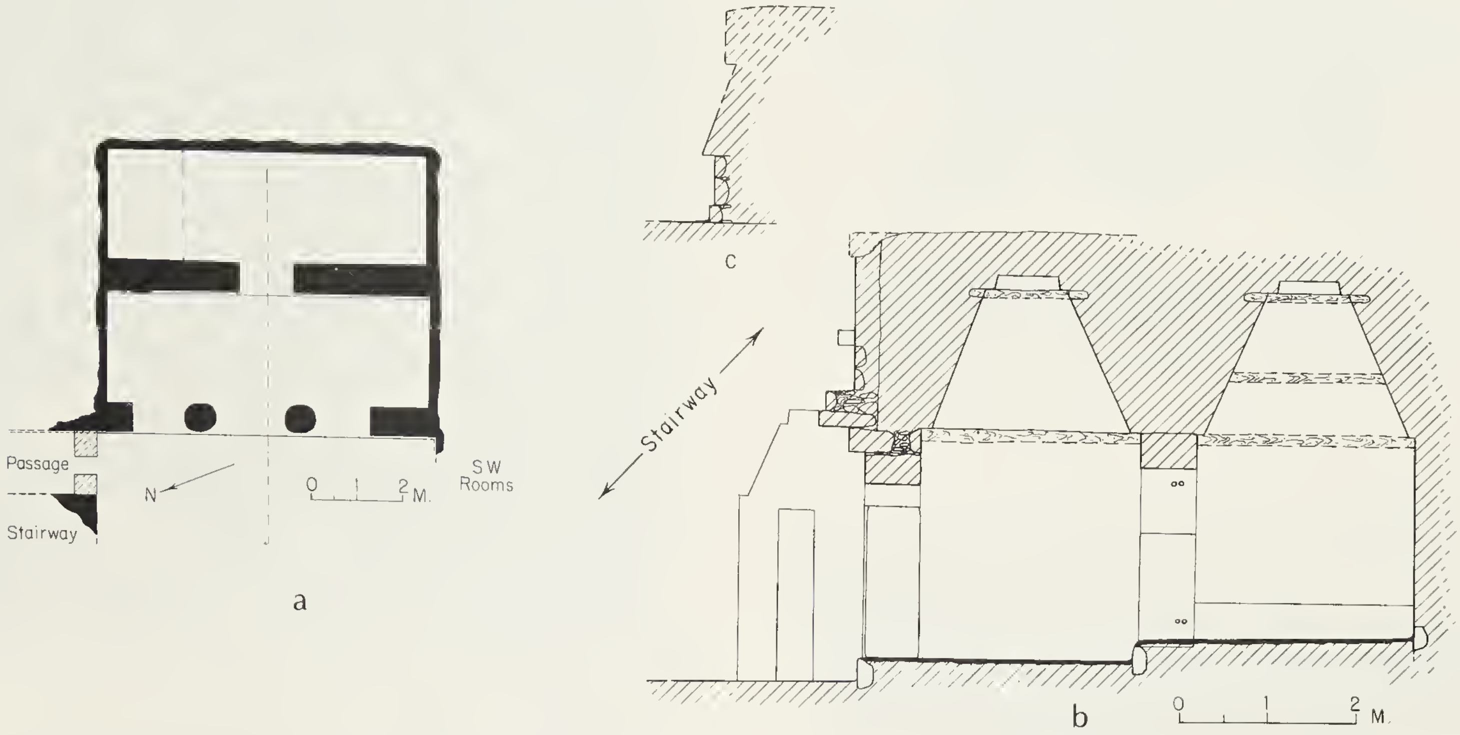


Figure 917. Halal, Acropolis, Northwest Building, second story, South Wing: a, plan; b, transverse section; c, section through north wall of third-story building platform (see fig. 916).

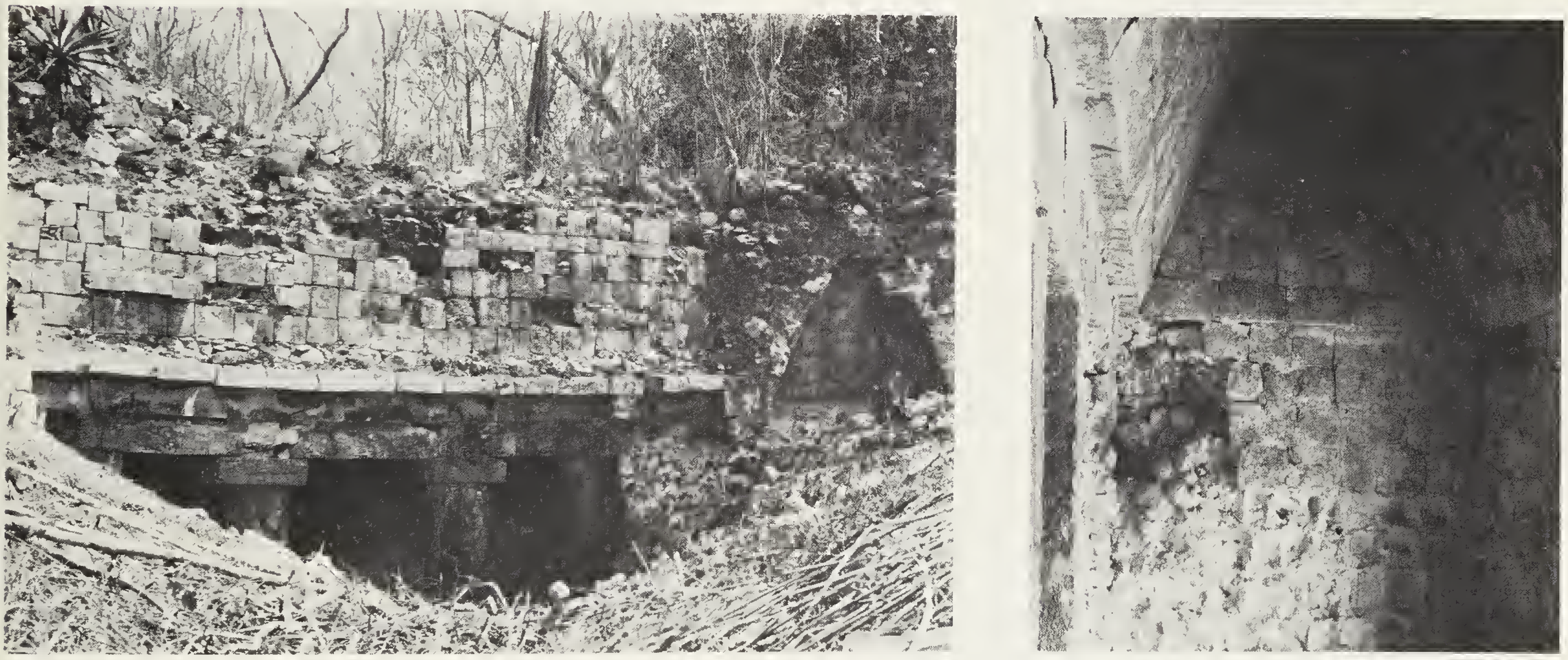

a b

Figure 918. Halal, Acropolis, Northwest Building, second story, South Wing: a, view from west, showing columnar entrance to outer room and remains of vault of adjacent southwest rooms; b, interior of outer room, looking south.

Main Building

This huge building, which consisted of at least five stories, seems to have faced west. My notes deal with some relatively well-preserved third-story rooms behind the stairway on the west side. The construction is of interest mainly in the decoration and the sequence of building alterations.

SUPERSTRUCTURE

THIRD STORY, WEST SIDE

Plan. See figure 919.

Sections. See figure 920.

Construction. Badly fallen stairway to fourth story rises over outer rooms (see plan) and is clearly a later

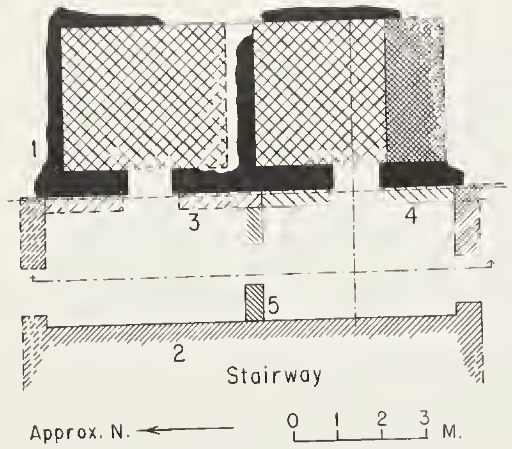


Figure 919. Halal, Acropolis, Main Building. Plan of third-story rooms behind west stairway: 1, rooms in original building; 2, room beneath stairway; 3, supporting masonry against wall of northeast room; 4, supporting masonry against wall of southeast room; 5, wall with doorway dividing room beneath stairway.

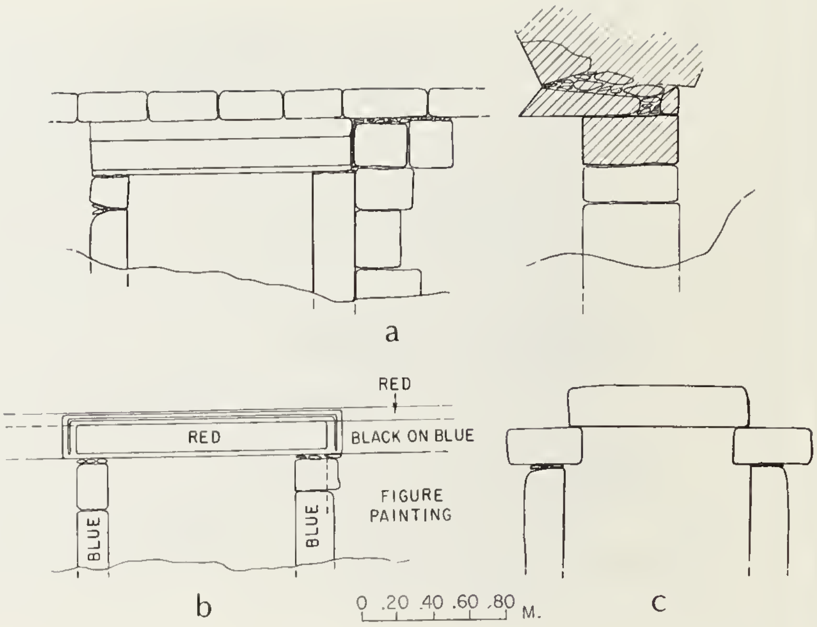


Figure 921. Halal. Acropolis, Main Building. Third-story rooms behind west stairway: a, elevation and section of doorway to northeast room; b, elevation of doorway to southeast room; c, elevation of south doorway to southwest room.

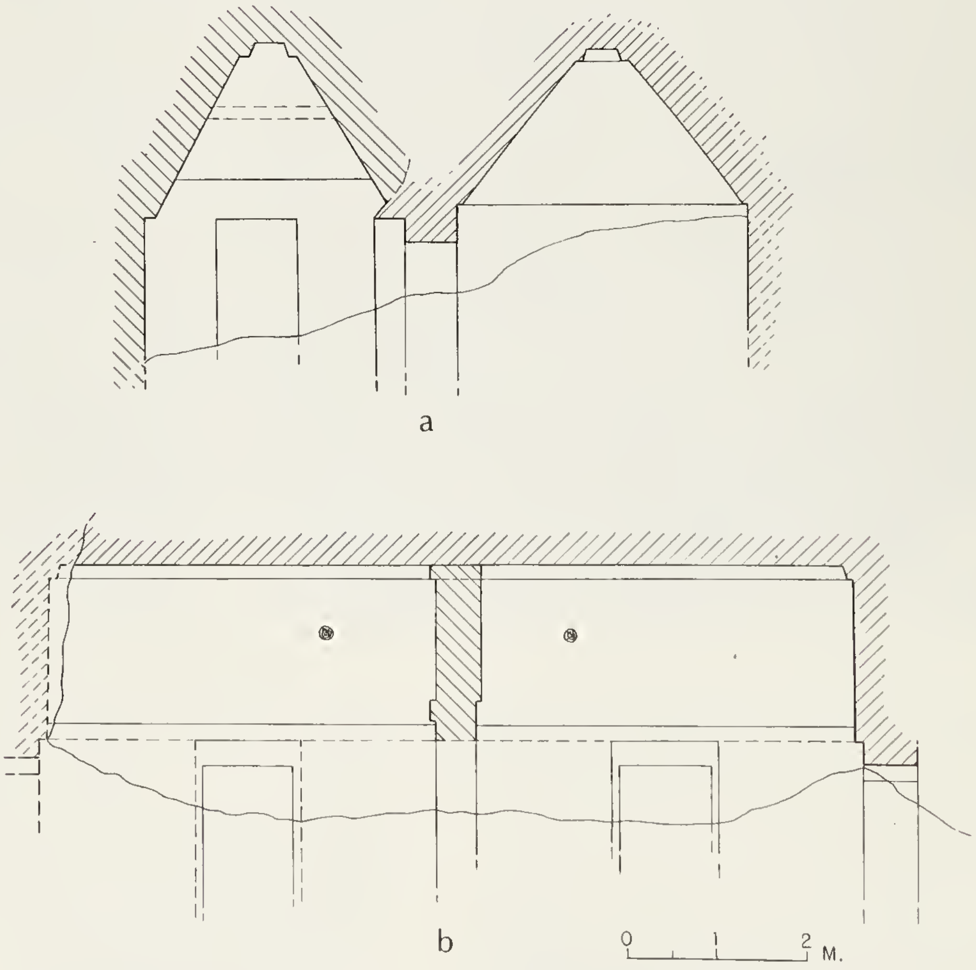
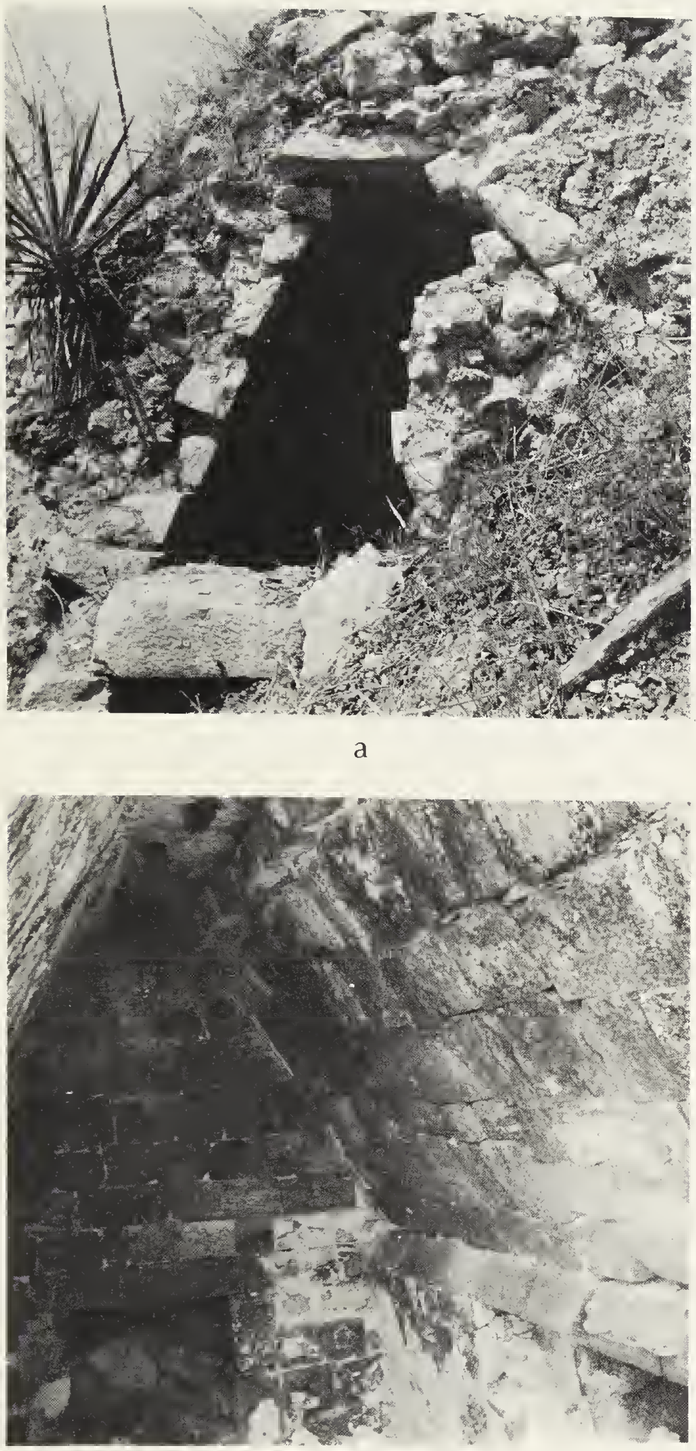


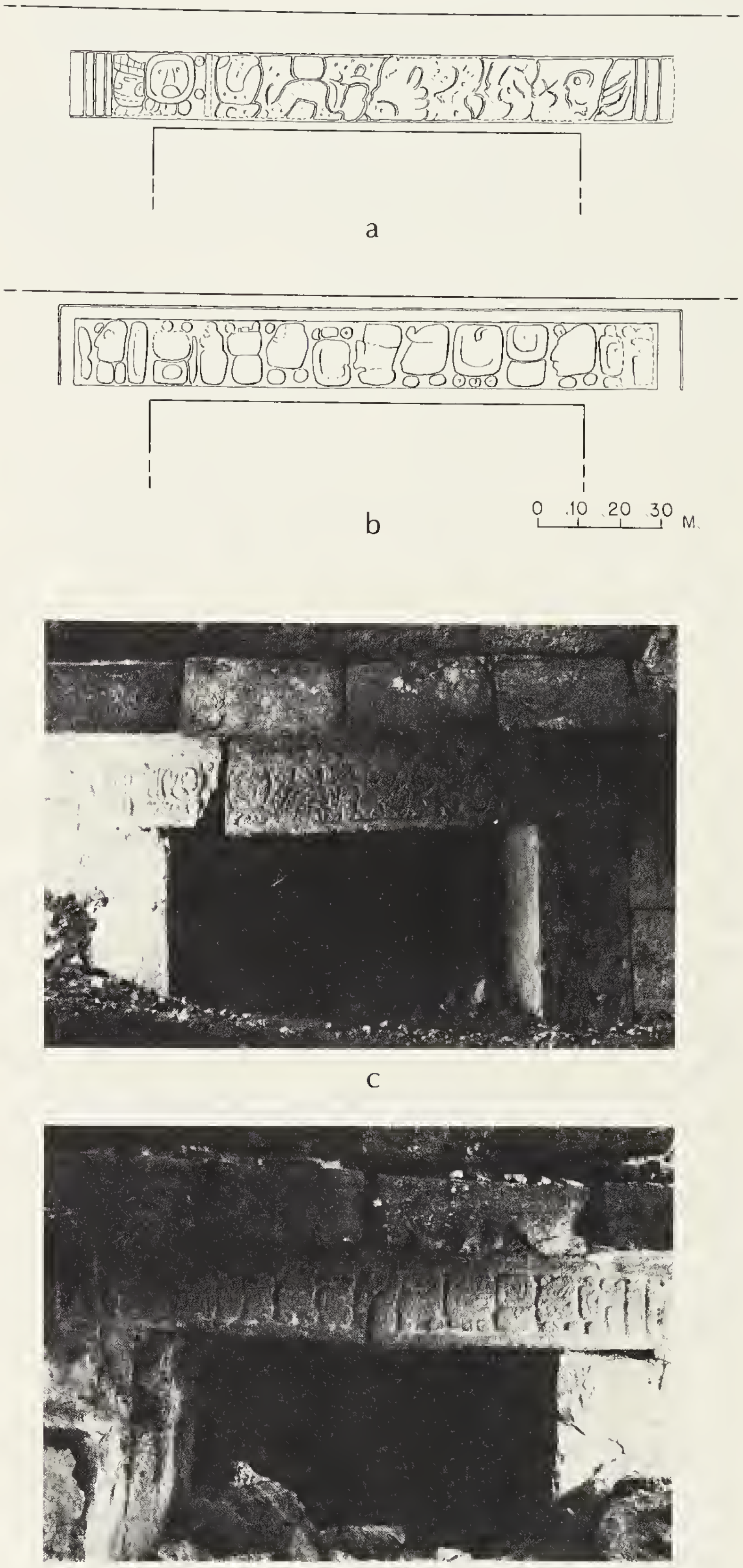
Figure 920. Halal, Acropolis, Main Building, third-story rooms behind west stairway: a, transverse section through south rooms; b, longitudinal section through west rooms.


a

b

Figure 922. Halal, Acropolis, Main Building, third-story rooms behind west stairway. Southwest room: a, view from south, showing vault masonry in section; b, interior, looking north, and showing wall and vault masonry.

construction than inner rooms. All doorways employ full-width jamb stones and stone lintels (fig. 921), the lintels of the doorways to the inner rooms being sculptured with hieroglyphs (see Decoration, below). South doorway to vaults under stairs, and possibly fallen north doorway, has corbels under lintel (fig. 921c). Vaults of outer rooms built of well-cut and faced stone, semispecialized to specialized (fig. 922). Only molding visible is first course, an apron member (figs. 921a, 922b), of old medial molding on western face of wall with doorways to inner rooms, which had once been an outer wall (see Secondary Construction . . . , below).



a

b

c

d

Figure 923. Halal, Acropolis, Main Building, third-story rooms behind west stairway. Glyphic inscriptions on lintels: a, c, doorway to northeast room; b, d, doorway to southeast room.

Decoration. Besides hieroglyphs carved on outer faces of lintels over doorways to inner rooms (fig. 923), the west face of wall with those doorways carried elaborate painting below old medial molding. Painting preserved by later masonry that covered wall (see Secondary Construction, below). Under surface of molding a purple-red and faces of lintels with glyphs also painted red. At each side of each lintel a horizontal band of hieroglyphs painted in black on blue background. Glyphs, which are in cursive style, seem to extend across entire face of wall, and carved glyphs on lintels seem parts of total text but accented by being red in color. Vertical blue band down face of each jamb of south doorway and north doorway presumably once the same. Below glyphic band and at each side of doorways there was figure painting in black, blue, and other colors (fig. 921b). There were bare traces of painting on the vault faces. As the plaster on the lower walls, which was protected by later masonry, was loose and unstable, we did not remove the secondary masonry and only glimpses of the hieroglyphs and figure paintings were possible.

SECONDARY CONSTRUCTION AND BUILDING SEQUENCE

Numerous alterations to third story, mostly due to construction of stairway to fourth story, and presumably due also to building of fourth-story structure at head of stairway. Two inner (east) rooms shown in plan (fig. 919:1) are part of what was originally separate building that faced west. When the stairway to the fourth story was built, a vaulted room or passage was constructed beneath the stairs (fig. 919:2). In the process of this construction, the upper facade and upper courses of the medial molding of the original building were taken down so that the new vault sprang from the first course of the old molding (figs. 920a, 921a, 922b). At some time, and presumably during or after the construction of the stairway and the fourth-story building, a block of masonry was laid across the south end of the south inner room, and still later the whole room was filled with stone. The north inner room was also filled with stone, one supposes at approximately the same time. Probably because of the added strain placed on the old front wall of the original building by the new vault under the stairway, supporting masonry was added to that wall, from floor to spring of vault, first in front of the north inner room (fig. 919:3), later in front of the south room (fig. 919:4). It is that masonry that has preserved the wall paintings (see Decoration, above). Lastly, a transverse wall with a doorway in it was built across the vault under the stairs, thus creating two rooms there (fig. 919:5).

MISCELLANEOUS NOTES

At the southwest corner of the Acropolis is a relatively well-preserved room that faces west on the broad terrace before the second story (fig. 924). Enough remains of the facade to show that it carried a medial molding of a single rectangular member that rose over the doorway to the room, a style first seen by us in the South Wing of the Palace at Labna (see p. 29), in the Temple at Sabacche (see p. 69), and that we have seen in a good number of buildings at other sites. A room with east-west longitudinal

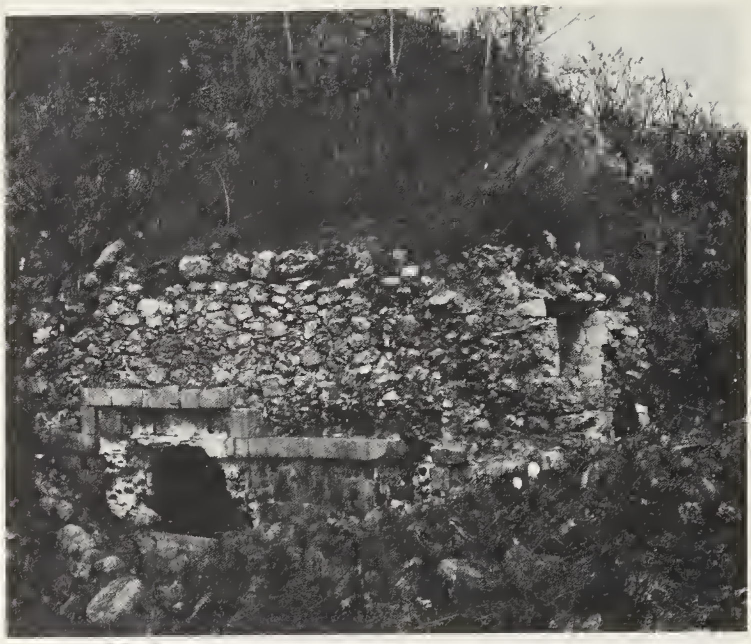


Figure 924. Halal, Acropolis, second-story room at southwest corner. Remains of west facade.

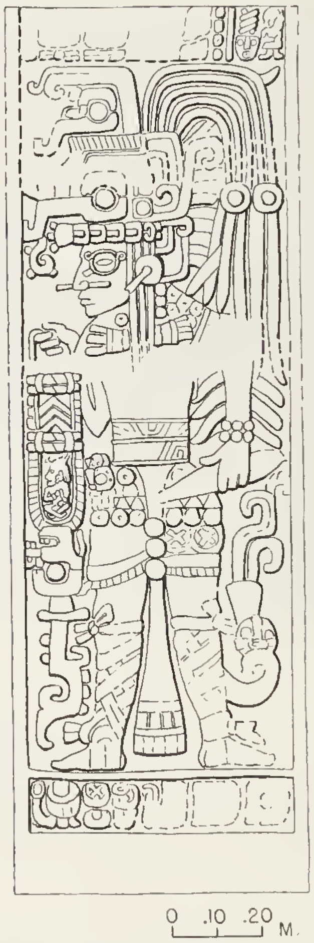


Figure 925. Halal, Acropolis. Sculptured doorjamb from western terrace in front of second story.

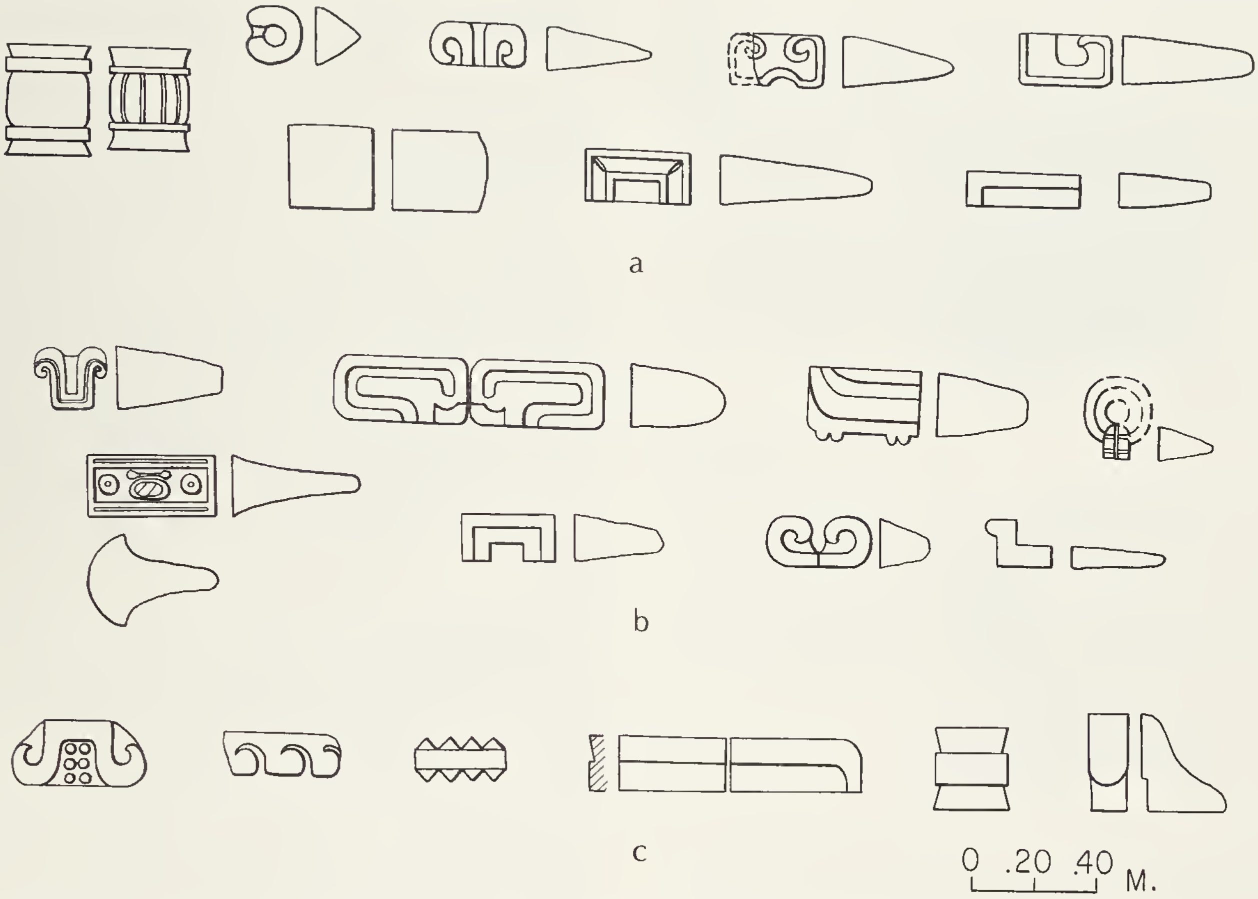


Figure 926. Halal, Acropolis. Fallen elements of facade decoration from second, third, and fourth stories: a, from north side; b, from south side; c, from west side.

axis was built against the south end of the first room and is obviously a later construction.

A sculptured doorjamb 1.97 m high by .65 m wide was found lying on the western terrace before the second story. The carving (fig. 925; and see Proskouriakoff 1950, fig. 104a; 1951, fig. 2c) shows an elaborately dressed human figure, possibly that of a priest. Above and below the figure is a band of hieroglyphs. See Proskouriakoff 1950 (p. 169) and 1951 (p. 111) for a discussion of the sculpture. It is impossible to say without excavation just where the jamb came from.

Number of elements from masks and other facade decoration (fig. 926) seen in building debris on north, south, and west sides of Acropolis. Apparently fallen from second, third, and fourth stories.

Four monolithic altars of typical Puuc design observed in court at south end of first terrace on west side of Acropolis. One carried traces around upper perimeter of sculptured band too badly weathered to determine whether glyphs, twisted-rope design, or some other motif. Number of other stones that may have been altars or column drums. One rectangular altar or section of column with familiar three-member molding carved on it (cf. fig. 890b, d). Another altar seen on small platform west of Acropolis and still another in Northwest Group.

Sculptured lintel .63 m wide and of indeterminate length found fallen at north side of Northwest Group. Carving (fig. 927; and see Proskouriakoff 1950, fig. 104b) shows human figure with huge feathered headdress and band of hieroglyphs above and below, like sculptured jamb from Acropolis (see above). See Proskouriakoff 1950 (p. 169) for discussion of sculpture.

MISCELLANEOUS SCULPTURE

M1. Fragment of human figure of stone (fig. 928a). Maximum height .32 m, maximum width .42 m. Lying on terrace before second story on west side of Acropolis.

M2. Highly stylized serpent's head (?) of stone (fig. 928b). Height .27 m, length .57 m. Fallen at west side of Acropolis.

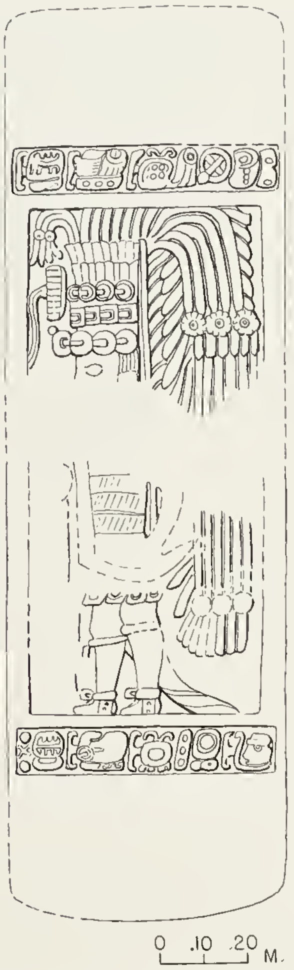


Figure 927. Halal, Northwest Group. Sculptured lintel from north side of group.

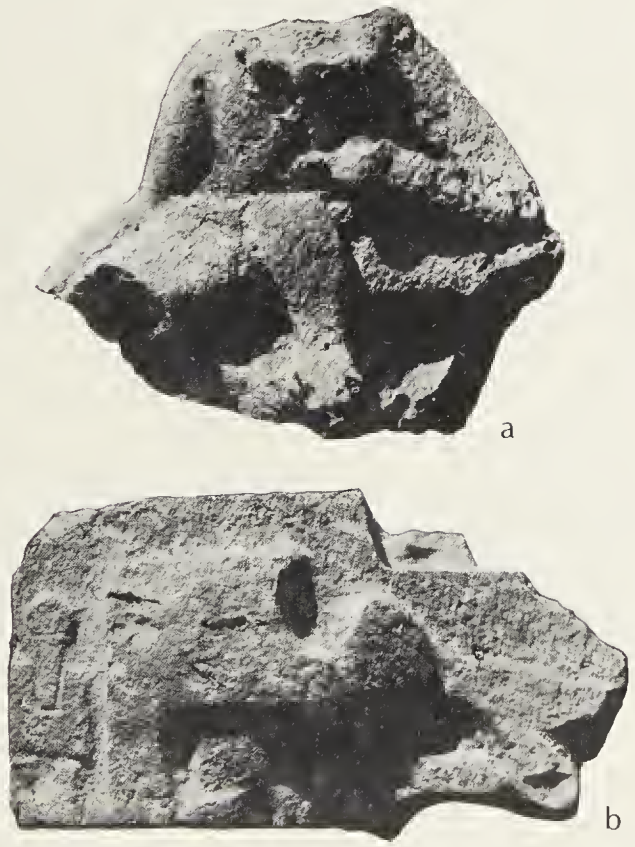


Figure 928. Halal. Miscellaneous sculpture: a, M1, seated human figure of stone; b, M2, stylized serpent's head of stone.

Itzimte, near Bolonchenticul

Since there is at least one other ruin by this name, I am identifying the present site as near Bolonchenticul, a good-sized town on the Merida-Hopelchen-Campeche highway.

I spent only one day at this large and extensive site. My notes are brief and in many respects unsatisfactory. Recently, Dr. Eric von Euw of the Peabody Museum, Harvard University, has mapped the ruins and made a more comprehensive study of the remains than I was able to do (von Euw 1977, pp. 1–31). Notable among his discoveries are twelve stelae resting on a platform like those seen at Sayil and Uxmal (see pp. 131, 218). The description that follows was written prior to the appearance of von Euw's report.

ETYMOLOGY

The *itzimte* plant, *Clerodendron ligustrinum* (Jacq.) R.Bro. (Roys 1931, p. 248; and see Maler 1902, p. 216). Variant spelling: Itsimte, Itzinte, Ytsimpte.

SITUATION

About 3 km north of Bolonchenticul on old road to Hacienda Yaxche.

TOPOGRAPHY

Generally level terrain interrupted by low hills. Construction located on hills and on level ground.

WATER SUPPLY

Stephens (1843, 2:139) mentions an aguada near the ruins which we did not see. Presumably it is without water during the dry season. Nearest permanent natural water supply is the famous cenote or cave of Bolonchenticul about 5 km to the south of Itzimte. There are also shallow wells that run dry in the dry season at Bolonchenticul. My notes make no mention of chultuns in the ruins but they undoubtedly are present. There is a very deep modern well in Bolonchenticul.

MAP

Map recently published by von Euw (1977, pp. 6–7).

SIZE

A very large site with many remains of large structures, all in a state of nearly complete ruin. I have no estimate of the extent of the site, but it may rank in size and importance with Oxkintok and the Great Cities.

CIVIC PLAN

Unknown. The site has been so extensively robbed of stone by the people of Bolonchenticul, and all structures reduced to such ruin, that there has been little incentive to explore carefully or map the remains.

REFERENCES

Maler 1902, pp. 216–217.
Maler n.d., pp. 16–18.
Ruz 1945, pp. 47, 79.
Stephens 1843, 2:139–241.

MAIN GROUP

There is so little architectural detail remaining at Itzimte that I have only scant notes on a few buildings in what I believe to be the central part of the site. My notes do not locate the structures in relation to one another.

Three-Story Building

Stairways on north and south sides of structure. Complete vault, in contrast to usual half-vault, under stairway. All vaults seem to have been flat sided and to have been built of finely cut, rather specialized stone.

Upper zone of facade shows vertical courses of small well-cut facing stone, separated by rough unfinished mortar. Facade apparently once carried stucco decoration. A fallen cut-stone decorative element, of a type associated with dragon-mouth facades (see Pollock 1970, fn. 16), and a single colonnette found in front of building.

Banded-Column Building

Stephens (1843, 2:140) describes this large building as "square and peculiar in its plan." An inner doorway, entered through what may have been a vaulted passage beneath the stairway, has a single banded column at its center (fig. 929; and cf. figs. 646a, 663, 910). The passage under the stairs, if such it was, seems to have carried a complete vault rather than the usual half-vault. A fallen section of molding consisting of a lower apron member, made of two courses of stone, and an upper small rectangular member is probably from the cornice molding, with the usual outward-leaning coping course lacking. The upper facade of the structure carried split columns, and Stephens (ibid.) observed red handprints on the walls (see pp. 761, 143).

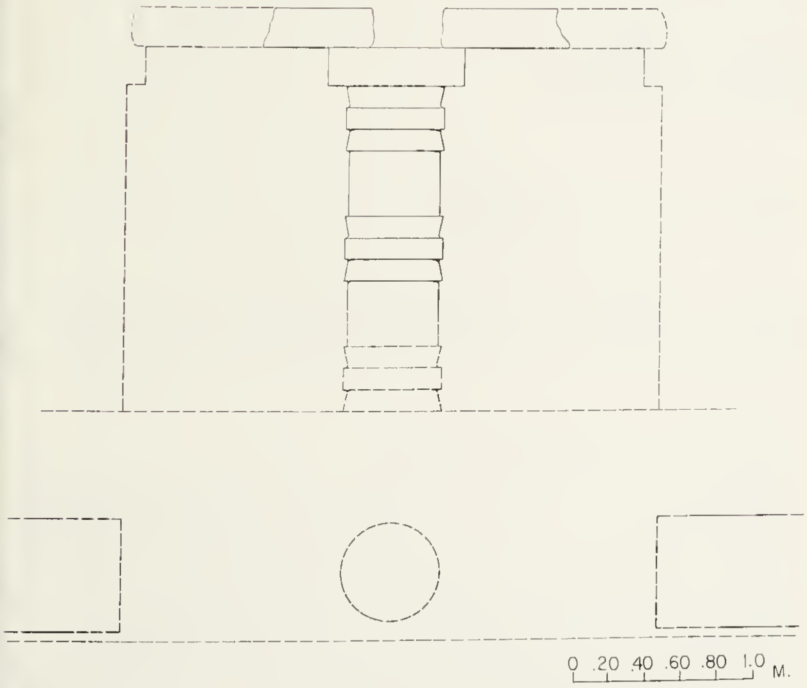


Figure 929. Itzimte, Banded-Column Building. Elevation and plan of doorway.

Building

Heavy medial wall 1.10 m thick. Jambs of doorway built of four vertical courses, of which the two outer are of cornerstones. Doorway, which narrows from bottom to top, is spanned by two stone lintels set side by side. Faint traces of black-line wall painting in one room.

Palace

Three-story structure that faces west. Top story has plain vertical upper facade above medial molding of single rectangular member at one place on building, and single apron member at another place.

Painted capstone in inner center room of third story. Painting in fine-line technique (see Pollock 1970, p. 57). Too faded to discern subject of painting.

Altars 1 and 2 (see Monuments, below) on terrace before third story.

Serpent-Head Palace

This structure, which was named by Maler (1902, pp. 216–217) because of the mask over the central doorway, lies about 500 m north of the Main Group. The building consists of three rooms in line and faces south (fig. 930). Maler gives the exterior dimensions as 20.96 m by 4 m. The base molding is a common type of rectangular first member, middle member of colonnettes, and a small rectangular upper member (cf. Labna, Palace, fig. 13). Wall stone is finely cut, faced, and fitted, and jamb stones, none of which remains, were almost surely of full-width variety. Vaults are unusual in that each is of slightly different design, that of the west room being without capstones and thus pointed at the top, that of the middle room carrying curved soffits and capstones, whereas the vault of the east room is flat sided and truncated with the usual capstones (ibid.). The medial molding is a heavy apron member made of two courses of stone, and above this a projecting course of linked circles (fig. 930). Maler (ibid.) believed the totally fallen cornice molding was the reverse of the medial, i.e., a string course of linked circles topped by the usual outward-leaning coping course.

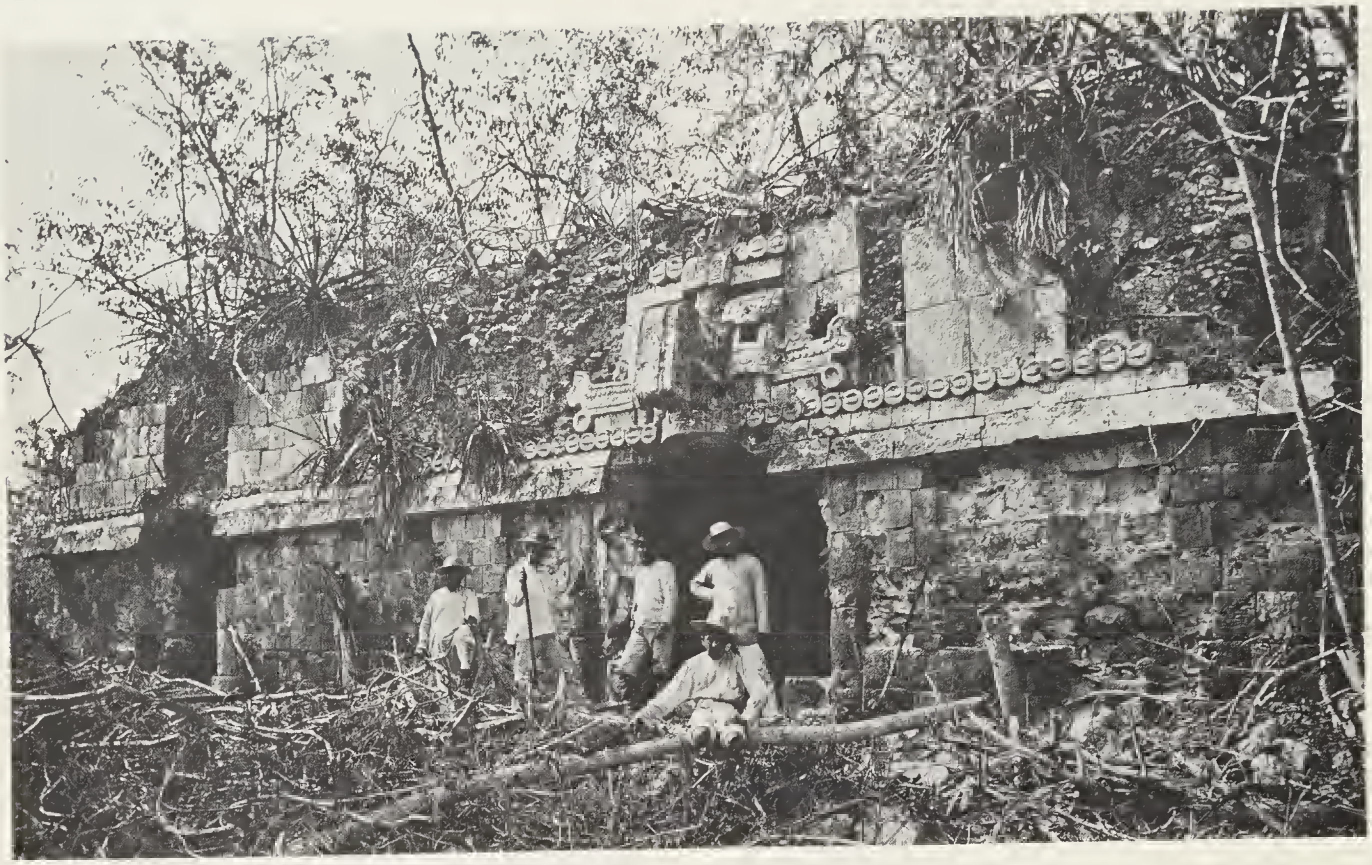


Figure 930. Itzimte, Serpent-Head Palace. View from south (Maler photo).

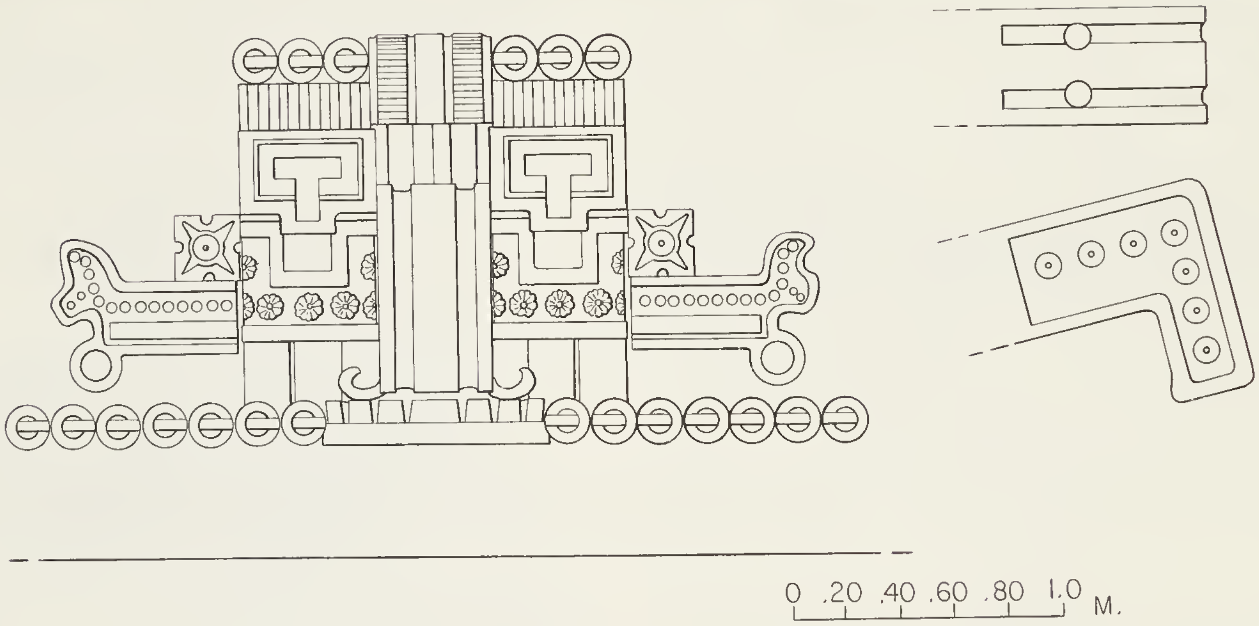


Figure 931. Itzimte, Serpent-Head Palace. Restored elevation of mask over center doorway and detail (top and side) of snout.

Aside from the moldings, decoration consisted of three-quarter columns at the corners of the building (cf. Chuncatzim, p. 57) and a large facade mask over the central doorway (figs. 930, 931; and see Hissink 1934, pp. 60–61). The only painting noted was a blue band around each hole that had once held transverse vault beams.

The exterior rear wall of the center room was finished with unfaced stone as if in anticipation of further building, possibly the foundation for a second story.

MISCELLANEOUS NOTES

Stephens (1843, 2:140) refers to a building with a decorated stairway. His account is not altogether clear but seems to describe the outer walls of the staircase as being decorated, an unusual feature in Puuc architecture.

One building we observed carried traces of a band of hieroglyphs on the rear wall of a room, just below the spring of the vault. The gylphs were painted in black and were bordered above and below by a line of red.

A causeway about 10 m wide runs eastward from the Palace (see above) to end at a mound about 100 m distant.

MONUMENTS

STELAE

We have mentioned the recent discovery of stelae, of which there are eleven carved and one plain, at Itzimte. They are fully described and illustrated by von Euw (1977, pp. 8–31).

ALTARS

There are undoubtedly many altars at the site. We recorded only two, both atypical of normal Puuc design.

Altar 1. Carved (fig. 932). Maximum height 1.15 m; diameter at top .95 m, at bottom .78 m. Lying on terrace before third story of Palace. Atypical column altar with rounded top and a shallow groove or channel across top and across bottom.

Altar 2. Plain. Maximum height .55 m. Lying next to Altar 1 on terrace before third story of Palace. Column altar with rounded top like Altar 1 but without groove across top or bottom.

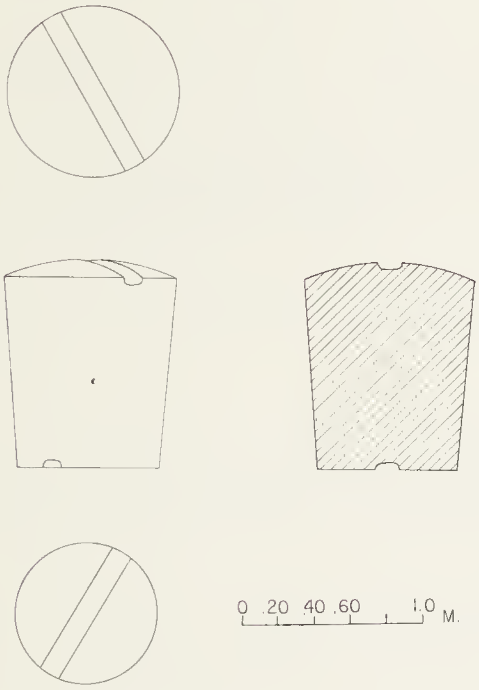


Figure 932. Itzimte. Altar 1, elevation, section, and plan of top and bottom.

Other Sites

Chunyaxnic

Tulane University (1940) map places this site 13 km west of Hacienda Yaxche and 11–12 km east of Halal. Maler (1895, p. 247) says the ruins lie some 10 km southwest of Yaxche, which places the site near Itzimte. I suspect Chunyaxnic is in the Tantah-Xculcacab region, but I have not visited the ruins.

Maler (1895, pp. 247–248; n.d., p. 19) describes and illustrates a little one-room temple building that sits atop a high hill and faces south. The structure is built of fairly well-cut and fitted stone and carries a perforated flying facade, features typical of one variety of temple architecture in the Puuc area. There seems to have been stucco decoration, almost entirely fallen in Maler's time, in the upper facade zone.

The only other remains seen by Maler at Chunyaxnic were the ruins of a completely fallen structure on the southern slope of the hill upon which the temple rests.

REFERENCES

Maler 1895, pp. 247–248.
Maler n.d., p. 19.

Tantah

(Tantha)

Approximately 10 km north of Bolonchenticul and 6 or 7 km north of Itzimte.

Maler (1902, p. 218) refers to two structures and some mounds at this site. Only one building was sufficiently well preserved to merit photographing. That building, which is well described and illustrated by Maler, is classic Puuc in style, featuring moldings with colonnettes, three-quarter corner facade columns, and an upper facade zone of double-banded split columns. At the center of the court in front of this structure Maler (ibid.) observed "a column diminishing somewhat towards the top." I take this to be a typical column altar resting upside down.

In the files of Peabody Museum of Harvard University is a photograph labeled, "Tantah, Campeche, Mexico. Temple building on Merida-Campeche highway." I assume that this is the Maler site. The photograph (fig. 933)

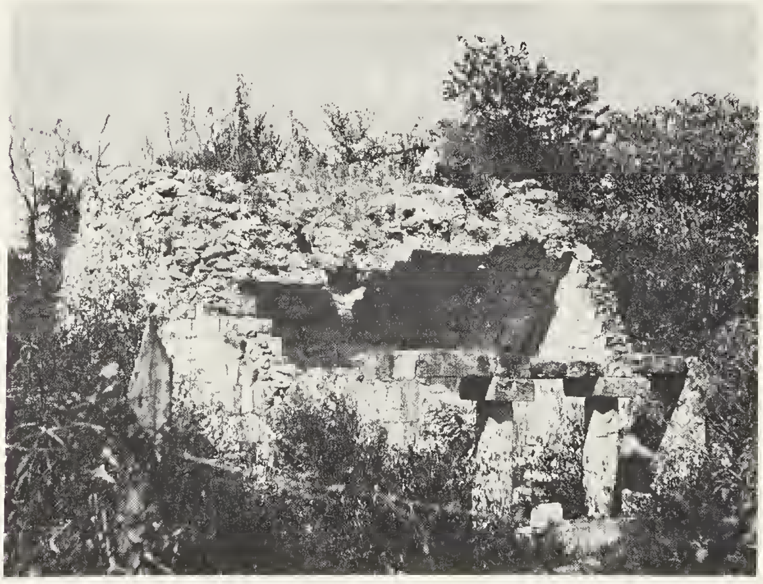


Figure 933. Tantah. View of building on highway.

shows a single room with multiple-entrance doorway of two columns with capitals.

REFERENCES

Maler 1902, p. 218.
Ruz 1945, pp. 46, 79.

Xculcacab

(Xculcacah)

This site is shown 5 km northeast of Itzimte on the Tulane University (1940) map and is listed by Muller (1960, p. 49) as having mounds. I have no information on these ruins.

Bolonchenticul

Town on Merida-Campeche highway approximately 43 km south of Uxmal and 28–29 km north-northeast of Hopelchen. Although Bolonchenticul is shown as a site of ruins on several archaeological maps, I know of no remains unless the wells in the plaza of the town (see Stephens 1843, 2:143–144) are considered to be partly artificial in nature. Possibly there is confusion between Bolonchenticul and the nearby ruins of Itzimte (see above). Pavon (1942, p. 52) illustrates a small sculpture of the head and upper part of the body of a human figure said to be from Bolonchenticul and now in the Museum of Archaeology, Ethnology, and History of Campeche.

Numun

This site is shown on the Tulane University (1940) map 2–3 km south of Sahcabchen and 10–11 km east of Bakna. Muller (1960, p. 40) reports mounds there. I have no further information on the site.

Yakal-Chuc

(Yakal-Chuk)

About 18 km southeast of Bolonchenticul and 7–8 km north-northwest of Ichpich. There is some confusion with regard to the identity and location of this site (see Ruz 1945, p. 106; and Pollock 1970, fn. 14).

Maler (1902, pp. 218–220) refers to Yakal-Chuc as a small site consisting of a number of mounds, a fallen temple pyramid, and one building in relatively good condition. He carefully describes and illustrates the latter structure, a two-room building with flying facade that faced south. The architecture is typically classic Puuc with colonnettes in the base molding, zigzag dentate elements in the medial and cornice moldings, banded split columns at the corners and in the upper facade of the building, and other common decorative elements including projecting tenons that presumably once supported stone or stucco figures. The flying facade is of the perforated variety.

REFERENCE

Maler 1902, pp. 218–220.

Ichpich

According to the Tulane University (1940) map, Ichpich lies about 25 km north of Iturbide and 30 km east and a little north of Hopelchen, which places the ruins in the general region of Xkichmook, Yakal-Chuc, and Santa Rosa Xtampak. None of these sites is accuratedly located on the map.

Maler's (1902, pp. 199–202) description suggests a small to medium-sized site with a fair amount of standing architecture. He describes three buildings in some detail, and apparently made photographs of each, but only two such pictures have been published (ibid.; Case 1911, p. 208; Zayas 1908, p. 67). The descriptions and illustrations indicate that the architecture of all three buildings is characteristically Puuc in style, the decorative elements of one structure being quite like those seen at Yakal-Chuc (see above).

A most unusual feature of Ichpich, as described by Maler (1902, pp. 199–202), is a paved area of hillside that formed a drainage slope leading to three chultuns.

REFERENCE

Maler 1902, pp. 199–202.

SUMMARY AND REVIEW

This final section reviews, summarizes, and briefly comments on the material presented in the preceding pages. It follows the topical order of the site descriptions.

9 · The Ruin Sites

Names of Sites

Relatively few of the names of ruins are of any great antiquity. There are probably more truly ancient names among the sites we have covered than in any other part of the Maya area, but even here they constitute only 12–13% of the ruins listed, with another 5–6% of questionable antiquity. It will be remembered that Kabah and Uxmal and possibly Sayil, if Seye is the same site, are named in the *Book of Chilam Balam of Chumayel* and thus attain pre-Conquest status. We cannot assume, of course, that these names go back to the time when the cities were being built and lived in—that may or may not be so—but we do know that they carried those names in the time the *Book of Chilam Balam* is recalling. Other names that go back to pre-Conquest times are those of native towns in existence at the time of the Conquest. Examples include Akil, Calotmul, Muna, Ticul, Xocneceh, and Xul in the Province of Tutul Xiu, and Bacabchen, Becal, Calkini, Dzitbalche, Hecelchakan, Pocboc, Pomuch, and Tenabo in the Province of Ah Canul. There is also Campeche in the Province of Canpech. Apparently not a town, but a pond near ruins, was the site of Tzemezakal on the boundary between the Xiu and Canul provinces. Here again we cannot assume that the names are of the same antiquity as the building remains now visible in these towns, buildings that may well have been in ruins in Xiu and Ah Canul times.

A great number of place-names in Yucatan, and the names of ruins are no exception, can be translated. In his scholarly work on this subject the late R. L. Roys (1935) translates and explains the derivation of many of them. It is interesting that a number of the names for which Roys cannot find a satisfactory meaning are demonstrably old, for example, Calkini, Kabah, Maxcanu, and Uxmal. In contrast, site names descriptive of ruins, or at least of an earlier occupation, which one would surely think were of fairly recent origin, are in some instances of considerable age, an example from our area being Calotmul (twin mounds), a place known at the time of the Conquest. This discrepancy suggests that the ruins are of a much earlier time than the people that named the site, just as the currently visible remains in the pre-Conquest Tutul Xiu and Ah Canul towns almost surely represent a time earlier than the Xiu and Ah Canul occupations.

Number and Distribution of Ruins

The area we have examined contains about 7,000 square kilometers and we have listed approximately 140 sites. I say approximately to allow for the possible duplication or of mistaken location in a few instances. The average of one site for each 50 square kilometers obtained from those figures does not seem to me very meaningful. A glance at the map (frontispiece) shows an uneven distribution, with the central part of the area exhibiting a far heavier concentration of ruins than the northern and southern parts. Particularly noticeable is the area north of Dzitbalche and west of the Uxmal-Muna line that is almost without sites until one reaches the Oxkintok-Maxcanu region. For some distance north of the southern boundary of the area as we have defined it (see p. 1) ruins are sparse, particularly in the eastern region. Dividing the Puuc area into northern, central, and southern zones would obviously give very different figures of square kilometers per site for each zone.

I have called attention several times to the relation between intensity of exploration and concentration of ruins on archaeological maps, and I strongly suspect that it is a matter to be taken into account here. One cannot, of course, be certain, but I should be surprised if adequate exploration did not discover a good many more sites in the northern and southern regions.

Of more importance to the question of concentration and distribution of ruins is the vexing problem of determining the limits of a site. This is particularly true in a region with a high concentration of remains, such as the central Puuc area. Are we, for example, calling a group of buildings, or a cluster of such groups, a separate site when in reality it is but an outlying part of a larger city? Chuncatzim's relation to Labna is an example, or the scattered groups and outlying ruins around Oxkintok. Conversely, are clusters of buildings such as Groups 14, 15 and 16, indicated on the Tulane map of Uxmal (fig. 388), truly a part of the city or are they small entities that should be treated separately? These are questions very much at the heart of our understanding of ancient Maya settlements, for they involve not only the character and function of the ceremonial center or city, but the social structure of and beyond the city. My work offers but the barest beginning toward an understanding of these problems. Fortunately, more recent work focused directly on settlement patterns has led to some progress toward this objective, but no such work has been carried on in the Puuc area.

Location of Structures

In the final section of the Introduction I tried to describe the rocky country that is the setting for the architecture we are studying, and in the description of each site under the heading Topography I have tried to relate the ruins to their immediate natural surroundings. It is important, I think, to picture the harsh setting of the region in order to appreciate the architecture. I suppose the central fact concerning the ancient Puuc builder's adjustment to his environment is that he used every variety of location afforded him, with the possible exception of footing his structures on soil rather than rock. This stricture offered no great constraint, however, as even in the savannas there are many outcrops or shallow rises of bedrock so near the surface that the dirt could easily be scraped away to expose a solid footing. In any event, the Puuc architect built on valley floors, on low rises, and on gradual slopes at the foot of hills. He terraced steep hillsides and built there, and he did the same along ridges and hilltops. No location seemed beyond his interest or his ability. He did, however, seem to have certain preferences in the utilization of the terrain. Over two-thirds of the sites for which we have careful observations on topography seem to have the ceremonial or civic center located on relatively level terrain, with outlying groups and structures on hillsides and hilltops. Moreover, if small hilltop ruins, such as Chuncatzim, Chacbolay, or Haltunsil, should turn out to be parts of larger sites, the proportion would climb to over three-quarters. By and large, the utilization of hilltops for building is more prevalent in the Campeche ruins than in the Yucatan sites.

Water Supply

Natural sources of water that produce a constant, yearlong supply are extremely rare in the Puuc area. Only at Bolonchenticul, at Chac, and reportedly at Xcoch, do I know of caves that reach the underground water table. It seems quite certain that the cenote at Cumpich, now blocked by debris, once led to water, and I suspect the currently dry cenotes at Xcalumkin may also have done so in ancient times. The small ruins and ancient towns at the foot of the western Puuc hills are at an elevation so close to the water table that any natural depression could have been exploited by a small amount of digging, and surface water appears to have been available at Acanmul where a unique situation prevailed. There are, of course, many caves in the Puuc ranges—the Oxkintok region seems to have a particularly large number—and some of these may well lead to permanent water, although for the most part caves appear to have been used to catch drip from the ceiling (see Mercer 1896).

Other sources of water are the natural rock basins known locally as sartenejas. These basins supply water mainly during the rainy season only, but some are so large and deep they are said to hold water the year round. We observed particularly large sartenejas in the Chacbolay-Kiuic region. These basins undoubtedly occur in large numbers throughout the area, but they could hardly have been relied upon to service any considerable population. There are also occasional shallow wells that reach temporary water.

How large a part aguadas played in supplying the ancient inhabitants with water, I am uncertain. We saw eight such ponds or reservoirs and know of two others by report. There may be many more. They seem to be more frequent in the southern part of the area. All the ones we observed are badly silted and I doubt if any offer a perennial supply of water today. I think it likely that most aguadas in the Puuc area were artificially improved, and it is possible that they once held water throughout the year. I doubt, however, that they could have supported the large population indicated by the number of ruins.

One cannot overestimate the importance of the vast system of chultuns constructed by the ancient inhabitants of the Puuc to solve the problem of a reliable and convenient supply of water. Almost every paved area, from plaza, to courtyard, to simple dwelling platform, seems to have had one or more of these underground cisterns. Besides occurring in great numbers, they are found in many shapes and sizes (see E. H. Thompson 1897, pls. 1–8). A very large chultun might approach a capacity of 35,000 liters; a small one might hold as little as 7,000. Properly maintained, they should have had virtually no leakage or evaporation, and only under the most extreme and unusual drought conditions might the chultun system be expected to fail (see Brainerd 1958, pp. 29–30, on this subject). There is little question in my mind that it was the exploitation of the chultun as a method of storing water during the prolonged annual dry season that permitted the large population indicated by the number of ruin sites in the Puuc area.

Maps of Ruins

Of the roughly 140 sites considered in this book only four have been mapped with any accuracy, and there are sketch maps of 13 others. One more site, Itzimte (but see von Euw 1977, pp. 33, 48–49, for maps of two sites not included here), has been mapped since my work in the Puuc area (see Graham 1975, pp. 10–11, for mapping procedures). I have discussed briefly the reliability of our mapping in the Preface to this book. None of the maps is complete in that all but one, that of Sayil, largely or entirely omit house mounds, and even the map of Sayil does not show many of those small structures. There is also the question of how complete the maps are in the matter of territory covered, i.e., whether the whole site is included. All in all, the task of mapping ruins in the Puuc has barely begun.

Size of Sites

In my description of ruins I have from time to time referred to the relative size of a site. This is implicit in the chapter headed Great Cities, and elsewhere I have used such terms as fairly large or small. Unfortunately, in judging size we all too often lack essential information. In addition to the already-mentioned difficulty of determining the limits of certain ruins, the lack of adequate exploration and mapping further deprive us of basic data. Although I can rather subjectively group some 60–70 sites into such categories as great, large, medium, and small, the chance of error is so great in most sites that, except for those in the first category, the results would be misleading. I think, then, about all we can justifiably say concerning the classification and distribution of ruins by size is that all the Great Cities, with the possible exception of Itzimte, lie in the Yucatan part of the area, although Oxkintok is at the extreme western tip, and that there seems to be a higher proportion of small or medium-sized sites in the Campeche sector. The latter part of this observation is especially pronounced if we set aside the ruins of the Xculoc region and the Southeastern Sites as intermediary in location.

Civic Planning

In studying the plans of Puuc sites we are again handicapped by the lack of maps. A feature that has commonly been stressed is the scattered, seemingly haphazard, location of structures and groups of structures usually arranged about a court (see Pollock 1965, p. 393). Although any site of some size in the Puuc area does indeed show a scattering of buildings, the locations probably being determined mainly by natural rises and in that sense haphazard, examination of our most comprehensive maps shows an alignment of major structures that can hardly have been by chance. This is seen clearly at Sayil (fig. 164) where the three major architectural complexes—those of Structures 2B1, 3B2, and 4B2, 3—are aligned along a north-south axis, their association being emphasized by connecting causeways. Similar siting is seen at Kabah (fig. 281), where Structures 1B2 and 3B1 are connected by causeways, and at Labna (fig. 3). At Uxmal (figs. 388, 389) the North Group, South Group, and Temple of the Chanchimez—the last a more important architectural assemblage than the map suggests—are all aligned on a north-south axis, but this time without connecting causeways. Lastly, the North Group, North Plaza, and South Group form a similar alignment at Oxkintok (fig. 477); and there is still another at X'Kukican (not illustrated), a site in some ways similar to Oxkintok. The fact that this alignment of important architectural complexes along an approximately north-south axis is found at six sites—all of them in the Yucatan part of the Puuc—suggests it is characteristic, with the exception of Oxkintok, of the eastern sites, or at least of the larger eastern sites. Such alignments will be worth watching for when ruins are mapped in the future, and they, together with the presence of causeways, may be of help in determining what to include within any one site, in other words, help in solving that vexing problem of where to draw the limits of a site in an area thickly strewn with ruins.

Looking at the maps of Kabah, Uxmal, and Oxkintok, one finds large and important buildings to the east of the axial alignments we have been discussing. This is true to some extent at Labna (fig. 3) but apparently not at Sayil. Whether it is a characteristic feature of civic planning at Puuc sites, I do not know, but it might be worth watching for as more mapping is carried out.

The supposed scattered arrangement of architectural groups in the Puuc has often been contrasted with the compact, integrated arrangement of connecting courts and plazas seen in many southern Maya cities. I think the contrast is not entirely valid, for there is considerable compactness in the central groups of a number of the Campeche or western Puuc sites. Unfortunately, we do not have adequate maps to illustrate this feature. The central groups, however, at Xculoc, Xcalumkin, Xcocha, Kanki, and probably at several other sites seem to be compact assemblages of interrelated buildings, courts, and plazas. Along with this concentration of structures, normally on the floor of a valley or in a savanna, there are usually outlying structures and groups of buildings on hilltops. It is probably the most common plan of sites of any size observed in the western part of the Puuc.

I suspect that the maps of Kiuic (fig. 592), Chacmultun (E.H. Thompson 1904, pl. 3), and Xkichmook (Thompson 1898, pl. 26) are too incomplete to enable us to draw conclusions concerning the civic plans. This is surely true of Xcavil de Yaxche (fig. 280) and of Acanmul (fig. 901), but at Acanmul the number of pyramidal structures indicates a divergence from Puuc architectural tradition. Small sites, such as Xkeche (fig. 571), Naox (fig. 661), Haltunsil (fig. 774), and San Felipe (fig. 844), each of which represents only a single group of structures, can only be described as maintaining the usual arrangement of buildings around courts and plazas. As shown here, Maioch (fig. 895) is a single huge plaza, but there probably are outlying buildings, and the size of the site sets it apart from the small ruins just mentioned. It might represent a period and style of architecture comparable to the early remains at Oxkintok.

ORIENTATION

Certainly the dominant principle in the orientation of Puuc architecture was that one of the principal axes of any structure should fall somewhat east of north. This is so consistently true that the occasional exception is notable. The principle applies not only to buildings and groups of buildings but to the major alignments we have just discussed. I refer here to the formal architecture, as I do not have sufficient information concerning domestic buildings, but I suspect they too conform to this rule. The extent of the deviation from true north varies not only between sites but between structures at any one site. It is most often, I think, a matter of a few degrees, but 20 degrees or more is not uncommon, and there are examples of over 30 degrees.

A strong tendency in the orientation of Puuc architecture is that the buildings in a group of structures face inward toward the center of the group, and that single structures and larger architectural complexes face toward the ceremonial or civic center of the site. This feature is by no means so consistent as the deviation from north just mentioned, and there are some glaring exceptions, but I think it was practiced far more often than not. One might take this tendency into account in deciding whether relatively distant, outlying structures are part of some central site or belong elsewhere.

Dates

This section reviews and comments on the epigraphic and other sources that offer the possibility of an exact dating of the ruins. A general chronology of the architecture is taken up later (see pp. 587–590).

There is a considerable amount of hieroglyphic material from the Puuc ruins, and there was undoubtedly once a great deal more, both sculptural and in the form of mural painting, of which there is ample evidence. Unfortunately, few of the glyphic texts are now decipherable. We have reliable recordings of dates from Oxkintok and from Xcalumkin. In the Goodman-Martinez-Thompson correlation of Maya and Christian calendars, which I am using, these dates are for Oxkintok, ca. A.D. 475, and for Xcalumkin, A.D. 744. There are tentative, some of them highly tentative, hieroglyphic dates from Labna (A.D. 862), Kabah (A.D. 879), Uxmal (A.D. 649, 905), Oxkintok (A.D. 751, 849), and Xcalumkin (A.D. 731–771). Some of these inscriptions have been read in a variety of ways—all of which have been referred to under the site descriptions—and there are a few other inscriptions, also referred to earlier, that do not seem to me sufficiently reliable to repeat here. In addition to these glyphic dates, a radiocarbon reading of A.D. 720 ± 60 comes from Sayil and three such determinations, A.D. 570 ± 50, A.D. 740 ± 60, and A.D. 885 ± 120, come from Uxmal. The corrected readings of these radiocarbon dates (see Damon et al. 1974) are, A.D. 730 ± 80, 590 ± 50, 760 ± 80, and 900 ± 130, respectively. There is also a documentary date of A.D. 674 from Uxmal.

The date of ca. A.D. 475 at Oxkintok is found on a lintel in a building that generally conforms to the architectural style of the Early Period (see p. 584 and fig. 934), and I think we must provisionally accept the inscription as dating the building, although I should be happier if it were 100 years later. More will be said of this below (see p. 588). No such doubts surround the Xcalumkin Initial Series date of A.D. 744, which to my mind securely dates the building and the architectural style it represents (see pp. 585–589).

The Labna and Kabah dates, A.D. 862 and A.D. 879, are on buildings of typical Late or Classic Puuc style, which are generally thought to be products of the ninth and tenth centuries, and present no problems. That is not true, however, of the date A.D. 730 ± 80 from Sayil. That date seems to come from the latest part of a structure of Late Puuc style, and one would expect a time 100 to 200 years later. We know, of course, that there are a number of ways by which radiocarbon dating can produce inaccurate results. The early dates at Uxmal, running from A.D. 590 ± 50 to A.D. 674, and the relatively early date of A.D. 760 ± 80 also present problems. The earliest of these, a radiocarbon date, comes from a lintel in the Lower West Temple of the House of the Magician. The reading A.D. 649 is from an inscription on the rings of the Ball Court. Another radiocarbon date, A.D. 760 ± 80, seems to come from a lintel in the House of the Birds (see p. 211). All these structures have commonly been thought to be of Late Puuc style, albeit possibly early in the Uxmal sequence. The dates seem too early for the style, and the documentary date of A.D. 674 recording the "depopulation" of Uxmal also raises problems. These will be discussed later (p. 589). The radiocarbon date A.D. 900 ± 130 from a lintel in the North Range of the Nunnery Quadrangle at Uxmal, on the other hand, is consistent with the generally accepted time of the ruins, and that is also true of the inscription possibly recording the date A.D. 905 that is painted on a capstone in the East Range of the same quadrangle.

The site of Oxkintok seems to have been occupied from late in the Early Period (Early Classic) at least through the Pure Florescent (Terminal Classic) and possibly later. The dates of A.D. 751 and A.D. 849, both from stelae, thus present no problems. Lastly, the Xcalumkin readings of A.D. 731 to 771 from buildings apparently similar to the building with the Initial Series corroborate the A.D. 744 date of that structure.

10 · Architecture

Groups and Complexes of Buildings

The location and disposition of architectural groups within the site is a subject touched on under Civic Planning. Here I shall try to summarize what we know of the internal arrangement of such groups. The court, a flat paved area, usually more or less rectangular in plan, is of course fundamental to Maya ceremonial architecture, and the Puuc remains are no exception in this respect. Although occasionally one sees two or more structures on a platform or terrace that can hardly be said to form a courtyard, the great majority of buildings rest on one or more sides of a court. A group may consist of a single court with its adjacent structures or a number of courts, that generally lie on different levels. Probably the most common arrangement, where more than one court is involved, is that the primary entrance to the group is at the lowest level, and as one penetrates the precinct he ascends to higher levels, the assemblage culminating at the highest structure on the far side of the highest court. The South Group at Uxmal (fig. 389) is a classic example of this arrangement, and there are many simpler examples (e.g., Northwest and East Groups at Kabah, fig. 281; North Group at Uxmal, fig. 390). The concept of elevating the most distant building from the entrance, in other words the effort to express remoteness, is seen even where there is only a single court, in which case the structure opposite the entrance is usually the highest and most prominent building (e.g., Cemetery Group and Nunnery Quadrangle at Uxmal, fig. 389).

Architectural groups are at times approached by causeways and at Uxmal groups or courts within groups are often entered through portal vaults, a relatively rare trait at other sites. A frequent feature is a small masonry platform near the center of a court. Monolithic altars are often associated with these platforms.

The acropolis of the type seen in the southern Maya ruins—a mainly artificially elevated complex of courts and buildings, often created by a long series of constructional activities—is rare in Puuc architecture. Nohpat and Halal (pp. 276, 547) are the only sites I think of with assemblages suggesting an acropolis of the southern variety. A common feature of the Puuc ruins, at times resembling the acropolis, is the hilltop and hillside grouping of courts and buildings. The Puuc builders routinely made use of natural elevations to raise their structures above the surrounding terrain, though this is often obscured by extensive terracing (e.g., Kabah, East Group, p. 171, and figs. 338–339). They ran their buildings and terraces up steep hillsides (see Chacmultun, p. 363) and placed architectural groups on top of relatively high hills. The North Group at Uxmal (fig. 390) is an example of the hilltop building, and there are numerous examples in the Campeche ruins. It seems to me that both the series of elevated courts and buildings culminating in a pyramid temple (Uxmal, South group) and the complex of courts and buildings on a hilltop (Uxmal, North Group) might be compared to the acropolis of the southern Maya ruins.

Types of Buildings

Most of the generally recognized types of Maya buildings (see Pollock 1965, pp. 409–412) are found in the Puuc. The pyramid temple, for the most part an easily recognizable type, is frequent at Oxkintok (fig. 477) and Acanmul (fig. 901), is relatively popular at Uxmal (fig. 389), and occurs sporadically elsewhere. Besides the three sites mentioned, we observed pyramids at 16 other sites, only three of which—Kabah (fig. 281), Kanki, and Kanchi—had more than one example; 11 additional sites are reported to have high mounds that probably were pyramids, of which two sites—X'Kukican and Chuncanob—seem to have four each. There are borderline instances of pyramid temples, for example, Edifice 1 at Xkichmook and the crowning structure of the Main Building on the Acropolis at Halal. But even including questionable examples, and allowing for a number of unreported structures of this type, pyramid temples can hardly be called numerous in relation to the number of ruins in the Puuc. They seem to be somewhat more frequent in the western Puuc than in the eastern, and the relatively large number of such structures at Oxkintok, all probably of the early period at that site, suggests the possibility that this form represents an early trait.

A few of the pyramids observed rest on the tops of high hills, and there are many other hilltop structures that may well have served as temples. Examples are the Northwest Hilltop Building at Xculoc (p. 383), the Temple at Xcalumkin (p. 450), and the North Building in the North Group at Cacabxnuc (p. 458), and there are many others. One wonders if these hilltop buildings were not considered by the ancient Maya to be similar to pyramid temples. Unfortunately, most superstructures on pyramids are fallen, and we do not have the plans or other details of these buildings as a guide; but since such plans as we have indicate at least five or six different arrangements, there is some question whether more plans would help us identify the type of building.

There are buildings seemingly of temple design that do not rest on pyramids or other high locations. Structure 1 at Sabacche (fig. 135), Structure 3B2 at Sayil (fig. 240), and the Eastern Building at Kupaloma (fig. 563) are relatively clear-cut examples; and there are others, such as Structures 1 and 2 at Mul-Chic and the East Building on the Southeast Court at Bakna (fig. 899), which are probably of early or relatively early date. There is, of course, always the question of where to draw the line between temple and shrine and temple and palace when dealing with types as loosely defined as these. Because of the limited excavation and lack of emphasis on the recovery of debris of habitation, our survey was not well suited to grappling with the problem of function of buildings. I believe, however, that many structures may have had dual or multiple functions, and that function may have changed over time. A rather simple example of this possibility is seen in Structure 1A1 at Kabah (fig. 282) where the lower story might be considered to be of typical palace design whereas the upper story shows every indication of having been a temple. A more complex example is Structure 2B1 at Sayil (figs. 173–178) that with its hundred rooms certainly suggests the residential function indicated by the term "palace," but which also carries a lofty third story that to a considerable degree exhibits the remote and esoteric qualities of the elevated temple. There are many, many examples of structures that, because of their numerous rooms, suggest residential use but also carry strong religious associations. Structure 2C6 at Kabah (figs. 338, 357) is an example.

I have little to contribute toward further defining or redefining the unfortunate term "palace." Structures conforming to what has generally been thought of as representing this type occur in great numbers and in a large range of sizes and designs. More will be said on this subject under plans of superstructures.

The remains of only three shrines, or what appeared to have been shrines, were observed. These were on Structure 3C2 at Sayil (fig. 248), inside the temple of Structure 3C3 at Oxkintok (fig. 505a), and on the pyramid at Xkepku (fig. 568b). Traces of small constructions such as shrines are often obliterated and easily missed in surface examination of ruins. I have no doubt that other buildings of this type are present in the Puuc but I doubt whether they occur in any frequency.

Ball courts have been found at four sites, Sayil (fig. 268), Uxmal (p. 242), Oxkintok (p. 288), and Xculoc (fig. 635). All appear to be of Acosta and Moedano's (1946) Type B. I suspect that more ball courts will be found in the Puuc ruins (see von Euw 1977, p. 47, for a recently discovered court).

Fourteen portal vaults, plus two other probable examples, are known at six Puuc sites. The majority are found at Uxmal where there are 11 such vaults if we include two questionable examples (fig. 389). They are in Structure 4 of the North Group; in the Cemetery Group, a questionable example; in the Nunnery Quadrangle; in the North Long Building, later blocked; in the House of the Birds, a questionable example; in the Palace of the Governor, two vaults, both later blocked; in the West Group; in the House of the Pigeons; in the South Range of the South Group, later blocked; and the free-standing arch in the southern part of the city (p. 263). Outside of Uxmal there are portals in Structure 11 at Labna (figs. 79–81), Structure 1B1 at Kabah (fig. 309), in Structure 2B8 at Oxkintok (figs. 489–491), at Xculoc (fig. 634), and in the Southeast Building at Xcochkax (p. 386).

Most portal vaults form passages through buildings, usually leading to an interior court, but there are three examples—at Kabah, Uxmal and Xculoc—of free-standing structures, similar in design, but not necessarily in concept, to the triumphal arches of our own architecture. I have expressed the opinion elsewhere (Pollock 1965, p. 412) that the function of these great vaults was to mark and formalize the entrance to a precinct. An exception might be the two passages through the Palace of the Governor at Uxmal (p. 242) where the architect seems to have used the device more for aesthetic than for functional purposes.

Small masonry platforms, often called ceremonial platforms, occur in large numbers throughout the Puuc ruins. Usually they are square or rectangular in plan, but occasionally round (e.g., Labna, Strs. 5, 12, figs. 72, 90; Oxkintok, at each side Str. 2B8, fig. 487; Xcucsuc, Main Group, p. 489), and they are characteristically located near the center of a court on which some important building faces (e.g., Kabah, East Group, figs. 338, 339). Often associated with the typical monolithic altars of the Puuc, which seem to have rested on them, these platforms and their altars may have played a part in the dedication of the adjacent buildings (see Kabah, Str. 2C7, p. 198). In any event they seem frequently to have held ceremonial or dedicatory caches (e.g., see Ruz 1955a, pp. 60–64), and platform after platform has been reduced to ruin, presumably at the hands of would-be looters.

A much rarer variety of low platforms, but in some respects similar to the ceremonial platform, is that supporting a number of monuments, both stelae and alters. These platforms are at present known only from Sayil (fig. 270), Uxmal (Terrace of the Monuments, p. 218), and Itzimte, the example at Itzimte recently discovered by Dr. Eric von Euw. I do not know whether caches have also been discovered in these platforms, but it seems not unlikely, and Blom's (1934, p. 57) description of the Uxmal structure suggests extensive excavation.

The artificial roads or causeways, locally known as sacbes or sacbeob, have been observed at Labna (figs. 3, 91), X'Kukican, Sayil (fig. 164), Kabah (fig. 281), Nohpat (fig. 474). Sacbe, Huntul-chac, Oxkintok (fig. 477), Cacabxnuc, Kanki, Halal, and Itzimte. Questionable examples of causeways were seen at Xculoc and Acanmul, and there is every reason to believe that the roadway connecting Kabah, Sacbe, and Nohpat terminates at Uxmal (see p. 276). This is the only intercity causeway known in the Puuc, but such constructions are often only one course of stone in height and are easily missed in heavily wooded terrain or in swampy areas. I suspect there are a good many of them yet to be found and some may cover considerable distances. I have elsewhere (Pollock 1965, p. 412) expressed the opinion that the function of the intracity roads was more in the nature of civic planning than of transportation or communication (see Kurjack and Andrews 1976, for recent information on intercity sacbes).

I have already reviewed structures dealing with the storage of water (see pp. 560–561). I have no doubt that there are a number of aguadas or reservoirs that are not at present known and that some of these will prove to be at least partly artificial. The ubiquitous chultun or cistern, which occurs by the hundreds if not thousands, unquestionably was the major source of water for the inhabitants of the Puuc at the florescence of their culture. I have suggested the existence of ancient wells where natural depressions approached the underground water table closely enough so that a small amount of digging would penetrate to water. This seems particularly likely at the western foot of the Puuc hills where the excavation of a good-sized chultun might reach the water table. The only wells, presumably ancient, that I actually know of, however, are those at Bolonchenticul and Becanchen, where an unusual local situation at each place allows a temporary supply of water to be tapped by shallow wells (see Stephens 1843, 2:143–144, 230–232).

Turning to types of buildings that do not occur, or at least have not been identified, in the Puuc ruins, surprisingly enough no sweat house has been found. I find this absence difficult to accept, and I strongly believe future work will uncover such structures. The diagnostic features of the sweat house are difficult to discern without excavation, and that is probably the reason none has so far been identified.

I do not know whether the oratory—a type of building found at Mayapan (see Pollock 1965, p. 411)—is present in the Puuc ruins or not. It has not so far been identified, and it will take careful excavation and study of the remains to permit any such identification. This type of building may well belong to a later time than that of the Puuc ruins. This could also be true of city walls that have not so far been found in the area (but see Kurjack and Andrews 1976, for recent information on city walls).

Substructures

The vast majority of buildings in the Puuc area rest on platforms and terraces, relatively low in proportion to length and width. With some notable exceptions, the pyramidal substructure met with only limited favor. Where height was desired, natural rises were often used, and even quite low terraces commonly took advantage of outcroppings of bedrock or little hillocks to provide some of the elevation required. Multistory buildings, the upper stories usually resting over solid cores, are not uncommon and are another device for attaining height. Although the pyramid is not featured at most Puuc sites, it is prominent at Acanmul, Oxkintok, and Uxmal, to a lesser extent at Kabah, and probably at X'Kukican and Chuncanob (see p. 564, above). The numerous pyramids at Oxkintok seem mainly or wholly to be of the early period at that site, and it is possible that this building form has early associations elsewhere.

Masonry of retaining walls and the interior fill of Puuc substructures runs virtually the full gamut of construction practices employed by the lowland Maya (see Pollock 1965, pp. 397–400). The most common masonry is fairly rough stone, well tailed in (figs. 179, 336), but there are examples of large, seemingly unfinished blocks (fig. 172), of well-cut and fitted blocks (figs. 133, 313b), and of veneer masonry overlaying rough inner walls (see p. 242). In many instances substructural walls today show no signs of having been built with lime mortar. How much this is due to leaching by centuries of rain, how often walls were in part dry laid, I am uncertain. Both varieties of masonry, plus mud mortar, were undoubtedly employed at one time or another. I am also uncertain about the use of lime plaster to cover substructural walls. It certainly was used at times, and, I suspect, with considerable frequency.

Terrace walls, which usually did not rise much over 2 m without being stepped back and a new terrace built, are often battered. Corners of substructures are normally rounded. Moldings are extremely rare but are not unknown. There is at least one example of a low wall or parapet along the edge of a platform (see p. 90), and there may have been other instances, but on the whole I think it was a device not frequently used.

Stairways in connection with substructures are most commonly of the projecting variety without balustrades, but inset stairways are not uncommon (e.g., see figs. 338, 339). There are examples of square blocks of masonry at each end of a stairway (fig. 138), of a central block of masonry that divides the stairway into two flights (see p. 293), and of niches in a stairway (see p. 294), but I know of no balustrades on substructural staircases. Two kinds of stairways were used, a gently rising stairway of deep treads and relatively low risers, usually employed to ascend not very high terraces, and a steep stairway of treads and risers roughly equal in depth and height (e.g., see figs. 138, 139a). Masonry of steps and of side walls of staircases generally reflected the character and quality of the masonry of the substructure, but this was not invariably true, some stairways being of better stone work than the substructural walls. As with substructures, it is often difficult to tell whether stairways employed lime mortar in their construction, but those of any considerable height almost surely did. Decoration of stairways is rare. There are occasional examples, however, (e.g., Temple of the Chanchimez at Uxmal, p. 258), the most notable being the hieroglyphic carvings on Structures 2B10 and 11 at Oxkintok (figs. 495–499).

The building platform—an intermediate terrace between the substructure proper and the superstructure that is often seen in the southern Maya ruins—is virtually unknown in Puuc architecture unless one considers the step-up to a building formed by the base molding to be the equivalent of a building platform. The base molding seems so much a part of the design of the superstructure, however, that it hardly qualifies as a building platform in the usual sense. There are a few examples of terraces or platforms that to some degree suggest building platforms. The high base of Structure 2C6 at Kabah is one (figs. 358, 368). The platform beneath the Upper Building of the House of the Magician at Uxmal is another. There are instances of upper stories resting on terraces that are reminiscent of building platforms (e.g., Strs. 2B1, figs. 176–178, and 4B2, fig. 258 at Sayil; Strs. 2A1, figs. 322, 323, and 2C3, fig. 352, at Kabah), but no one of them closely resembles the classical building platform of the southern Maya ruins. Unfortunately the upper terraces and superstructures of the pyramid temples at Oxkintok, probably all of early date, are badly fallen. It is possible that building platforms existed here, but the architecture of these early structures is not, of course, of traditional Puuc style.

Superstructures

PLANS

As might be expected of an architecture that developed over a long time and to a point of considerable sophistication, plans of buildings show great versatility. Certain patterns emerge, dictated by building site, or function, or perhaps custom at some particular period of time, but the builder had a wide range of plans to choose from and he seems upon occasion to have been willing to experiment and even to break with tradition.

There are fewer small buildings of one or two rooms than might be expected. This may be due partly to faulty exploration and recording. Unless a small structure is in fairly good state of preservation, it tends to be overlooked. In any event I can point to only about a dozen single-room buildings (e.g., fig. 132), and two of these, Structures S1 and S2 at Labna (fig. 92), show by their unfinished ends that more rooms were planned though never completed. Three of the remaining examples, Structures A and B at Mul-Chic and the East Building on the Southeast Court at Bakna (fig. 899), seem to be of an earlier period than the florescent Puuc style of architecture, and it is possible that small structures were more common in early times.

Small two-room buildings are found with three different ground plans. In the most common arrangement rooms are placed end to end, facing in the same direction. (e.g., see fig. 696). Next in favor is a plan with an inner and outer room (see fig. 437); and the least used has two rooms placed back to back and facing in opposite directions (see fig. 562). The second and third of these plans were probably used in both early and late times, whereas the first arrangement of rooms placed end-to-end seems to have found favor in later periods. Most one-room buildings, and two-room buildings with rooms facing in opposite directions, and a good proportion of buildings with a plan of an inner and outer room, carry roof structures with their attendant decoration, which heighten the association of these small buildings with ceremonial and religious functions, even when they are not in elevated locations.

One of the plans the Puuc architect most often used consisted of three rooms in line, all facing in the same direction. Examples are the Adjacent Palace at Chunhuhub (fig. 672) and the Serpent Head Palace at Itzimte (fig. 930). Frequently the center room employed a columnar entrance, as seen in Structure 1A5 at Kabah (fig. 300) and the Sculptured Columns Building at Xculoc (see p. 379). Interestingly, Structure 4B1 at Sayil (fig. 249) was built with a central columnar entrance that was later converted to a simple rectangular doorway. The same was true of the Building of the Sculptured Columns at Xculoc (pp. 379–382). What is, so far as I know, a unique arrangement of three rooms in line is found in the Upper Building of the House of the Magician at Uxmal (fig. 389) where the center room is entered from the west although the end rooms face east.

A much less frequent three-room plan, consisting of a long front room and two rear rooms, was favored at Xcalumkin where there are three examples, South Building of the Initial Series Court (fig. 703), First Addition of the Northwest Building in the Main Group (fig. 720), and the Temple (fig. 754). Elsewhere this arrangement seems to be relatively rare. Even rarer is the plan of a central room flanked by transverse rooms—seen by me only at Chelemi (fig. 780) and at San Pedro (p. 471, East Building), and with questionable examples at Sayil—or the plan of two parallel longitudinal rooms with a transverse room across one end, at Kabah (fig. 339, Str. 2C4) and at Chelemi (fig. 783). Actually, this plan may at one time have prevailed in Structure 3C6 at Oxkintok (fig. 507), but it is a questionable example. It seems to me that the Kabah, Chelemi, and San Pedro buildings are probably aberrant forms of a rather common four-room plan of two longitudinal and two transverse rooms that will be discussed shortly. All the examples just mentioned from Xcalumkin and Chelemi carried roof structures and may well have been temples. The San Pedro structure was too fallen to observe whether it had had a roof structure. Lastly, there is a unique building of three parallel rooms, Structure 1B1 at Oxkintok (fig. 478). It appears to be of the early period at that site.

Buildings containing four rooms are quite common and, of course, allow rather greater variety of plan than the smaller structures. Somewhat surprisingly, the simple arrangement of four rooms in line, all facing in the same direction, is used sparingly. Structure 3C1 at Sayil (fig. 246), the Half-Column Palace at Huntichmul (fig. 581), and Structure 3 in Group 1 at Kiuic (fig. 592) are examples. Even more surprising is that I have recorded only two instances—the South Building in the West Group at Xcorralcot (fig. 878) and a questionable example at Sayil—of two pairs of inner and outer rooms, an arrangement that one might expect in numbers.

A much-favored four-room plan, indeed, one of the most popular building plans in Puuc architecture, is that of two parallel longitudinal rooms with transverse rooms across each end of the building. Typical examples are seen in Structure 3A3 at Sayil (fig. 229), the Northeast Building in the North Group at Uxmal (fig. 390), the West Building at Xkeche (fig. 571), the West Building of the North Group at Xkastun (fig. 846), and the Central Building of the East Group at Xcorralcot (fig. 874). There are numerous variations in this basic plan—in placement of doorways (e.g., figs. 224, 390, 905) and in length of transverse vaults (e.g., figs. 540, 731)—and we have just mentioned certain three-room buildings that seem to be aberrant forms of the type. Other atypical forms are seen in Structure 3B5 at Oxkintok (fig. 524) and in the East Wing of the Building of the Glyphic Band at Xcocha (fig. 851). It is probable that Structure 3C7 at Oxkintok (fig. 519) was a typical example before a secondary west wall was added to form a third longitudinal vault.

This much-used four-room plan and related forms seem to have begun early and to have run pretty much throughout the course of Puuc architecture, as we at present know it. What seem to be early examples are seen in Structures 3C5, 3C6, and 3B5 at Oxkintok (figs. 507–518, 524–529), and the South Building of the East Group at Xulmil (figs. 579, 580). Structures that might be of intermediate date are the North Building in the North Group at Cacabxnuc (figs. 767–772), the Building with Stepped Vaulting at Chelemi (figs. 783, 784), the North Building on the Summit Court at Xkalachetzimin (figs. 833, 834), the East Building in the South Group at Xcorralche (figs. 835–837), the South Building of the Main Group at Kanki (figs. 885–886), and the West Building on the Southeast Court at Bakna (see p. 535). What may be later buildings, although not necessarily of fully developed Puuc style, are Structure 2C4 at Sayil (figs. 223–228), the upper story of Structure 5 in the North Group at Uxmal (figs. 390, 393, 394), Structures 3C7 and 3D1 at Oxkintok (figs. 519–523, 540), the West Building at Xkeche (fig. 571), the East Wing of the Building of the Glyphic Band at Xcocha (figs. 851–857), and the west summit building of Structure 1 at Acanmul (figs. 904, 905). On the whole, this building plan seems to have been most popular relatively early in the Puuc architectural development.

There are suggestions that the four-room plan of two longitudinal and two transverse vaults was used for temples or, at least, for buildings of highly religious purposes. Structure 4 at Labna (figs. 63–71) and Structures 1B2 and 3B1 at Kabah (figs. 312–314, p. 200) rest on high pyramids. Structure 1 at Acanmul is a very high mound, and the summit buildings may well have been temples. The five-room Structure 3B2 at Sayil (fig. 237), almost surely a temple, shows what may be a related plan. The Xcalumkin, Cacabxnuc, Xkalachetzimin, Xcorralche, and Xcorralcot examples mentioned above are all located in prominent positions on hilltops. Lastly, a high percentage of buildings with this plan carried roof structures.

A plan used less frequently than the one we have been discussing, but repeated often enough to stamp it as a type, consists of three rooms in line and a fourth behind and entered from the center room. Examples are the North Building in Group 22 at Uxmal (fig. 398), the South Temple in the South Group at Uxmal (fig. 440), the West Building in Group 17 at Uxmal (fig. 460), and probably the second story of the Building with Paintings at Ichmac (fig. 794). Structures 2A2 and 2A3 at Kabah (fig. 322) originally had this plan, the rear room of each building later being divided into three chambers. A variant but seemingly related plan is seen in Structure 2C7 at Kabah (fig. 374), where evidently five front rooms were to be built. The Unfinished Building at Uxmal (fig. 449) may have been designed to have either five front rooms or the more conventional three. Still another plan that is different but possibly related is seen in the Main Palace at Chunhuhub (see p. 400).

It may be seen from the discussion above that this building plan was much liked at Uxmal. In at least one instance—the South Temple in the South Group—it was used in the design of a temple. If we are correct in considering the designs of Structure 2C7 at Kabah and the Unfinished Building at Uxmal to be related to the basic plan of three front rooms and a central rear room, that design, or a very similar one, would seem to have been in vogue at the very end of classical Puuc architecture. The North Building in Group 22 at Uxmal also seems to be of late workmanship.

It is obvious that, as the number of rooms in any building increases, the opportunity for greater variety and complexity of plan also increases. It is hardly surprising, then, that structures of five or more rooms laid end-to-end and facing in one direction are not very common. Such structures do occur, however, as can be seen in Structures 1C1 (fig. 316), 2B3, and 2C5 (fig. 338) at Kabah. Such alignments of rooms are more frequent in connection with multistory buildings, a subject that will be discussed shortly. Related to the simple plan of rooms placed end to end are certain L-shaped buildings, often used to limit and define a court. Examples are Structure 2 at Labna (fig. 3) and the Northwest Building in the Hieroglyphic Group at Xcalumkin (fig. 735). Once again, the plan is more often used with multistory structures (see below). Lastly, simple alignments of a number of rooms are sometimes brought about by the joining of separate buildings by later construction. Structure 5 at Sabacche (fig. 138) is an example.

As might be expected in multichamber structures, rooms were often arranged in parallel lines. It has already been mentioned that two pairs of inner and outer rooms, the simplest of such arrangements, is a rare plan. Slightly more common is three such pairs, seen in Structure 3B1 at Sayil (fig. 232), Structure 2 in Group 1 at Kiuic (fig. 592), where the center rooms have secondary fill; the lower story of Structure 4 at Almuchil (fig. 690), and the lower story of the East Building of the East Court of the Palace at Sisila (fig. 807) where the center rear room is filled secondarily. In a different arrangement the rooms of each pair face in opposite directions, as in Structure 1A6 at Kabah (fig. 300), and Structure 5 in Group 1 at Kiuic (fig. 592). Using the basic plan of parallel lines of rooms—arranged either as a series of inner and outer rooms or of rooms facing in opposite directions—the Puuc architects erected some of their largest and most imposing buildings. Examples are Structure 1A2 at Kabah (fig. 290), the upper story of Structure 2C2 at Kabah (fig. 339), the East, South, and West Ranges of the Nunnery Quadrangle, and a number of the buildings in the South Group at Uxmal (fig. 389). Aberrant examples are the North Range of the Nunnery Quadrangle and the House of the Governor at Uxmal (fig. 389).

Three or more parallel ranges of rooms are rare. Examples are Structure 1 at Xlabpak (fig. 116), the House of the Turtles at Uxmal (fig. 389), the early Structure 1B1 (fig. 478), the unique Structure 3B1 (fig. 500), and Structure 3C7 (fig. 519), all at Oxkintok, Edifice No. 3 at Yaxche-Xlabpak (fig. 587), and the building on the Lower Terrace at Xkalachetzimin (see p. 495). The building at Xlabpak and Structure 3C7 at Oxkintok apparently both started with two parallel ranges of rooms and were later converted to three. The west wing of Structure 1A2 (fig. 290) and the upper story of Structure 2C3 (fig. 339) at Kabah have very heavy medial walls and I suspect pertain more to buildings with rooms built around a solid core, referred to below, than the design we are at present considering.

Puuc builders, in common with those from other regions of the Maya area, showed a marked preference for placing the upper stories of buildings over solid fill rather than over the rooms of lower stories. The practice was occasionally not adhered to, as, for example, in Structure 3B1 at Oxkintok (figs. 500, 501), but such exceptions are rare in Puuc architecture. The solid base for the support of the upper stories was attained either by a naturally rising terrain with the addition of artificial fill or by artificial construction alone. Examples of the use of natural rises plus artificial construction are Structure 1 at Labna (see pp. 10–31), Structures 4 and 6 in Group 1 at Kiuic (fig. 592), Xetpol and Cabalpak at Chacmultun (see pp. 366–368), and Tiers 1, 2, 4, and 5 at Xcochkax (see pp. 387 and 396). Construction of this sort is probably most common in connection with series of rising courts, and it is sometimes difficult to determine whether a structure should be considered an upper story with a broad terrace in front or a separate building behind an upper courtyard.

Buildings relying solely on artificial construction—either of pure fill or of filled earlier rooms—to support upper stories are, I believe, more frequent than those utilizing natural rises. The most common design is of a central core beneath the upper story with ranges of lower-story rooms on one or more sides of the central foundation. Examples are Structure 1 at Chuncatzim (fig. 103), Structures 2B1, 2B5, and 4B2 at Sayil (figs. 173–176, 212, 213, 257, 258), Structures 1A1, 2A1, where one suspects other rooms were planned at the north and south, 2C2, and 2C3 at Kabah (figs. 282, 283a, 322, 323, 339, 340a, 342, 352), Temple of the Chanchimez at Uxmal (figs. 450, 451), the northeast building of Tier 5 at Xcochkax (fig. 656), and Structures 3 and 4 at Almuchil (figs. 684, 690, 691). There are a number of structures of this nature where an upper story obviously was planned but never built, as seen in Structure 2C6 at Kabah (figs. 338, 340b), Structure 6 in the North Group at Uxmal (figs. 390, 395), Structure 2C1 at Oxkintok (fig. 477), the Castillo at Chacbolay (fig. 588), and Structures 1 and 2 at Chacmultun (pp. 364, 365).

Much less frequently found than the plan just mentioned is that of a solid central core to support an upper story and lower story rooms in wings at each side. Examples are the East Structure in the South Group at Muluchtzekel (fig. 160), Structure 1B1 (fig. 165), the building at the west end of Structure 2B1 Complex and Structure 2B4 (fig. 164) at Sayil, Structure 1A4 at Kabah (fig. 300), and the Building of the Glyphic Band at Xcocha (fig. 851). Such buildings seem at times to have had only a front stairway, at times stairs at front and rear. Somewhat similar to this design, but with the stairway only at the rear, is that of the Temple of the Columns at Uxmal (fig. 413) and

Structure 2 in Group 3 at Kiuic (fig. 592). In each of these buildings the upper story seems to have come as an afterthought.

I am uncertain whether the colonnade of more than a single row of columns is found in Puuc architecture or not. Structure 9 at Acanmul (see p. 540) may be one, but it is by no means certain. If there are such colonnades, they are surely rare. Buildings consisting of a single room entered by a colonnaded entrance on one side are known but again are rare. Our two examples are Structure 4 at Sabacche (fig. 137) and the Inner East Building of the House of the Magician at Uxmal (fig. 425) in its original form. Structure 1A3 at Kabah (fig. 300) and the upper story of the Temple of the Chanchimez at Uxmal (fig. 450) may also have had colonnaded entrances.

I mentioned at the beginning of this section that plans of buildings showed great versatility, and the preceding discussion by no means encompasses all designs. A study of the maps in this report, particularly those of Sayil (fig. 164) and Kabah (fig. 281), will show a number of arrangements not covered here. Some buildings seem to have been added to continually and to have grown without any overall plan, the final design being the result of natural topography, the presence of earlier structures, or perhaps contemporary function. Structure 1 at Labna (fig. 3) seems to me to follow that pattern. Some of the building at Xcochkax (pp. 386–396) and at Halal (pp. 547–552) may also be of that nature, but the destruction is too great to be certain.

Plans of some structures are unique or highly unusual. Examples are the House of the Governor at Uxmal (see fig. 389), Structure 3B1 at Oxkintok (figs. 500, 501), and Structure 2 in the Chacmultun Group at Chacmultun (see E.H. Thompson 1904, fig. 5). Most unusual are Edifice No. 3 at Yaxche-Xlabpak (fig. 587) and the building on the Lower Terrace at Xkalachetzimin (see p. 495). Also rare are rooms at half-story height, as seen in Structure 2B5 at Sayil (figs. 212–214) and probably in Structure 3 at Naox (see p. 399). The plan of the north and south wings of the House of the Birds at Uxmal (fig. 420), and probably of a building described by Maler (1902, p. 200) at Ichpich, in which a central room juts forward, seems equally infrequent. These are but examples and others could be added.

BASE MOLDINGS

Virtually all Puuc buildings have a base molding. Of the scores of buildings examined, there are only two—Structures 2B8 and 3B5 at Oxkintok (figs. 489–491, 524, 525)—that seem to have carried no such molding. The most common style of molding is the simple course of dressed stone that projects slightly from the surface of the wall above (e.g., figs. 65, 74, 75, 105). This type is found on what seem to be very early buildings, for example, Structure 3C5 at Oxkintok (fig. 508), the original part of the West Building of the North Group at Yakalmai (fig. 824), and the East Building of the Southeast Court at Bakna (fig. 899), and apparently continues throughout the course of Puuc architectural development. Possibly late examples are on the North Building in Group 22 (figs. 398, 399) and the West Annex in the South Group (fig. 437) at Uxmal. The type is particularly common at Oxkintok and in the western Puuc sites, where the visible remains may range in date somewhat earlier than in the east.

Next in frequency of occurrence to the simple projecting course of stone is the three-member molding of upper and lower rectangular members, separated by a row of colonnettes (e.g., see figs. 13, 59, 60, 258). The two types, the simple and the three-member with colonnettes, account for about 80% of all base moldings observed. The three-member style, which does not seem to be as early as the plain molding, is much used in the eastern Puuc, where it approaches the simpler style in popularity.

A form closely similar to the three-member molding with a continuous row of colonnettes is one with groups of colonnettes alternating with plain areas in the middle member. The groups may include three (figs. 326, 619), four (figs. 443, 449), or five colonnettes (fig. 143), three being the most common, four being favored at Uxmal. This style, which seems pretty well restricted to the eastern Puuc, should possibly be thought of as only a variant of the three-member molding with a continuous row of colonnettes; if the two styles are combined, their number surpasses that of the simple molding in the east, though not for the Puuc area as a whole. Altogether the styles so far mentioned account for 90% of all base moldings seen.

Turning to unusual forms that make up only about 10% of all base moldings observed, there are several instances of what appear to be two-member moldings, but I suspect that some of them may originally have held three members, of which the lowest was subsequently covered by a later floor. In any event, such moldings occur as a simple string course above a plain member (e.g., figs. 166, 167, 555), as a string course above colonnettes (fig. 36), and as a string course above colonnettes in groups of three (see p. 372). The highly decorated platform under Structure 2C6 at Kabah carries a two-member molding at the top (figs. 367, 368), but it is questionable whether it is the equivalent of a base molding.

Unusual three-member base moldings take the form of three plain members, the middle one recessed (figs. 445, 568a), or of an apron, string course, and reverse apron above (figs. 601, 602, 665b), with various decorative designs in the middle member (figs. 626, 660, 670, 861), or with the upper two members decorated (fig. 452). The molding on Structure 2 at Chuncatzim (fig. 115) is unique.

There are a few instances of base moldings with four members. They seem to occur either as (from top to bottom) a string course, an apron, colonnettes, and a rectangular member (figs. 34a, 640a), or as a reverse apron, string course, colonnettes, and rectangular member (fig. 691; and see Seler 1917, fig. 99). The highly decorated four-member molding at the center of the west facade of the Upper Building of the House of the Magician at Uxmal (ibid., fig. 100) is unique.

STAIRWAYS ✓

Exterior stairways that lead to upper stories are numerous, and in some instances there are more than one to a single structure, e.g., Structure 2B1 at Sayil (figs. 173–178), and Structures 2A1 (figs. 322, 323), 2C2 and 2C3 (figs. 339, 340, 352) at Kabah. The common design is that of a steep projecting staircase with the treads only slightly larger than the risers. The steps are usually made of dressed stone and undoubtedly were covered with plaster (fig. 182b). Side walls of staircases were faced sometimes with roughly cut stone (figs. 193, 324a), often with well-faced stone (figs. 207, 284), and these walls seem on occasion to have carried decoration (fig. 453a). The flat ramps at each side of the stairway, unfortunately known as balustrades, are present but apparently not in great numbers (figs. 177, 207, 642). There are indications they may be a late feature in Puuc architecture (see pp. 105, 387). Although the projecting staircase is far and away the most common, there are instances of recessed stairways (e.g., on Structure 2 at Chacmultun, see p. 365) and of stairways projecting at the bottom but recessed at the top, as on the second story of the Xetpol structure at Chacmultun (see p. 367).

A common element in the design of exterior stairways to upper stories is a vaulted passage transecting the staircase (e.g., figs. 283a, 342, 352). The passage usually, but not invariably, led to the doorway of a room behind the staircase. The standard design of such passages called for their being spanned by a half-vault, but three-quarter vaults (e.g., fig. 641) were used, and occasionally a complete vault (fig. 920, and see p. 555). I know of only one example of more than a single passageway transecting a staircase (fig. 588).

Occasionally steps were used to facilitate entrance to rooms or in structures where there was a considerable change in floor level. Examples of outer steps are seen at Structure 3 at Kiuic (see p. 354) and in the masks with snouts serving as steps on Structure 2C6 at Kabah (figs. 338, 360, 367). Steps to inner chambers are found in Structure 2A2 (figs. 322, 329) and in Room 7 of Structure 2C6 (figs. 360, 371) at Kabah, in Structure 2 of the Chacmultun Group (fig. 613a) and in the first story of the Xetpol structure (see E.H. Thompson 1904, figs. 8, 9) at Chacmultun, and in the center rooms (fig. 666) and north rooms (see p. 401) of the Main Palace at Chunhuhub. The only interior stairways leading to upper stories that I know of in the Puuc area are those in the apparently early Structure 3B1 at Oxkintok (figs. 500, 501).

FLOORS ✓

Our work did not involve any considerable exploration of floors of buildings. All too often, large areas were deeply covered by debris and we did not penetrate even to floor level. One can, nevertheless, mention some general characteristics of Puuc floors.

Although the construction of flooring varies in detail, it nearly always follows the broad scheme of a leveling layer of rough dry-laid stone, on which is imposed a layer of finer stone—sometimes laid dry, sometimes mixed with mortar—and these layers capped by a layer of mortar with an upper surface of polished plaster. Sections of floors are shown in figures 183, 344, 524, 525, and 852.

I am uncertain about the coloring of floors in buildings, but I believe that some color was employed at times. The uncertainty arises from my not being able to distinguish between original color and subsequent stain from fungus or other agents. My notes list colors ranging through white, cream, cream-yellow, buff, dark buff, reddish buff, tan, light brown, and reddish brown. I have also seen nearly black floors, but I do not think that was the original color.

The standard practice in Puuc architecture is for the floor level to rise from outer to inner rooms (e.g., see figs. 117, 291, 398). There are a fair number of exceptions to this design (e.g., see figs. 238, 524, and p. 444), but the vast majority of buildings follow it. Usually the rise is only a single course of stone some .10–.30 m high, but occasionally it is much higher (e.g., see figs. 358, 666). A rise in floor level is often associated with the underlying terrain, the rise being made necessary by outcroppings of bedrock, and where this situation occurred the problem might be solved by a raised floor (e.g., see p. 367), or a bench (figs. 831b, 832b), or both (fig. 166).

Limited as our explorations were, they were sufficient to show a constantly repeated superposition of new floors over old. Lower members of base moldings were often hidden (e.g., see fig. 451), and at times most or all of the molding was buried (e.g., figs. 215, 508). Floors inside buildings were raised for reasons not readily apparent (e.g., see figs. 233, 329). Much of this renewing of floors undoubtedly was due to structural changes, but style may also have been a factor. We were not able to afford the time for tracing floors over any considerable distance, and rarely was the precise reason for the rebuilding apparent. What did show plainly, as in other aspects of Puuc architecture, was the restless energy of the builders.

WALLS ✓

Puuc wall construction has commonly been referred to as veneer masonry. The term comes, of course, from the relatively thin facing stone that encloses a hearting of lime concrete, the hearting presumably affording the primary support rather than the facing. This is the classic Puuc construction that has often been illustrated (e.g., E. W. Andrews 1965a, fig. 19b; Pollock 1965, fig. 17c). In point of fact, wall masonry shows a long development and covers a large range of stone cutting and shaping.

The earliest Puuc wall construction, best seen at Oxkintok, exhibits a facing of heavy blocks—sometimes moderately well cut (fig. 480b) but often roughly cut (fig. 509)—with many spalls between stones (figs. 508, 511, 513a). The facing undoubtedly contributes largely to the strength of the wall, in contrast to later construction, but the important thing to notice is that even at this early date the builders had hit upon the technique of a cut-stone facing enclosing a concrete core or hearting. From this early stage the development seems to have been to smaller and better cut and fitted stone with a more ample concrete core (e.g., figs. 562c, 565, 567, 766, 768), then to a better shaped, more specialized facing stone (figs. 37, 446b, 759b), and finally to the superbly cut and fitted, tilelike stone of Puuc wall construction at its best (figs. 401, 438; and see E. W. Andrews 1965a, fig. 22). It is interesting that the several unfinished buildings we observed all employed the finest quality masonry (e.g., figs. 375, 449c), which suggests that the Puuc architectural development ended with a masonry technique at its peak, and that it ended abruptly.

The breaking of joints to create a stronger masonry, although it is seen occasionally (e.g., see fig. 405a), seems not to have generally been understood by the Puuc builders. They also lacked knowledge of the proper bonding of intersecting walls, a fault that allowed longitudinal walls to pull apart from transverse walls (e.g., see fig. 145) and that eventually led to the collapse of many structures. The builders did, however, frequently employ large, specialized, exterior cornerstones that may have added some strength to the masonry (e.g., see figs. 68, 152, 342d, 407b). The facing of outer wall surfaces was nearly always better than that of inner walls, except that an interior wall with a doorway leading to an inner chamber was usually faced with stone of a quality used on outer surfaces. Both inner and outer walls were, I think, almost invariably covered with plaster, often several layers thick.

Wall thickness varies greatly and is, I believe, mainly a function of size and design of the building, although earlier builders may have had some tendency to use heavier construction. Medial walls, which carry the sides of two vaults, are characteristically heavier than outer walls, and the presence of a flying facade or roof comb is usually reflected in greater thickness of the wall below. In the rare instances of upper-story rooms overlying lower rooms (e.g., see fig. 501), walls are heavy relative to width of room. I have recorded a medial wall only .38 m thick at the doorjamb (see fig. 678), whereas the immensely heavy rear wall of the Palace of the Governor at Uxmal approaches 3 m in thickness. These are the extremes. The figures given for wall thickness in the East Wing of Structure 1 at Labna (see p. 15) are probably about average for construction of that size. A characteristic of Puuc walls that makes any but the most detailed measurements unreliable is the frequent practice of constructing walls that taper from room corners to doorjambs (e.g., see fig. 144a), as well as walls that thicken from bottom to top (see figs. 514, 734a, 885).

I have called attention to the practice of erecting a building by stages (see figs. 147, 317). The first stage carried the walls to the level of the medial molding, at which point the walls were capped with plaster and presumably allowed to rest until the lime mortar matured, possibly over the dry season when water for mixing mortar was scarce. I do not know if the earliest Puuc builders followed that practice, but it was in use relatively early. When the next stage of building—the construction of the vault—began, there were still one or two courses of interior wall facing to be laid, and these were slightly inset from the plane of the wall below. This inset band around the room just below the spring of the vault is characteristic of later Puuc architecture.

DOORWAYS ✓

Both the simple rectangular entrance and the multiple entrance are common in Puuc architecture (e.g., figs. 13, 34, 178). Although the simple entrance gives the impression of being rectangular, there is in fact a strong tendency for doorjambs to incline inwards slightly so that the opening is about .10 m narrower at top than at bottom (e.g., see fig. 19). Multiple entrances are most often formed by columns, but rectangular pillars and piers are also employed. Doorways consisting of two columns are the most common (e.g., fig. 354a), but many have only a single column (e.g., fig. 342b), and there are rare examples of three (figs. 703, 716), four (p. 537), five (fig. 137), and possibly even eight columns (fig. 425). In one instance an even greater number of columns was observed (see p. 540), but the plan of the structure is not known. Rectangular columns or pillars as doorway supports are known but are relatively rare (figs. 601, 605b, 658, 773b). Masonry piers were also used (e.g., figs. 224, 404, 570, 726, 758), possibly in greater numbers than we have recorded. Columns and pillars seem invariably to have carried capitals; piers at times did, at times did not. Capitals were almost always rectangular and were complemented by small corbels at the top of each jamb. Occasionally simple doorways have corbels similarly located (e.g., see figs. 159, 882).

Sizes of doorways vary considerably and are, I think, to some extent a function of size of structure, although not invariably. The average width of opening in either simple or multiple entrance doorways is about 1–1.20 m, with .80 m being small and 1.50 m large. Extremes are about .60 m (e.g., see fig. 500) and 2 m where stone lintels are used (see pp. 414, 458), and a maximum of 2.50 m in the case of wooden lintels (see p. 144).

Although Puuc doorjambs are thought of as most typically made of large, well-cut and dressed stones, each of which runs the full width of the jamb, there is in fact considerable variety in the masonry of doorjambs. The early buildings at Oxkintok and Yakalmai employed wall stones faced on two sides to form the corners of the jambs (see p. 291 and fig. 514), or a combination of such stones and other stones that ran the full width of the jamb (figs. 525b, 824). In keeping with the walls, the masonry of the jambs is roughly cut and faced, and there are numerous spalls between stones. This early construction seems to be succeeded by masonry of fairly well-cut and dressed, but rather small stone (fig. 885c), again in keeping with the wall masonry. There was also a technique of constructing jambs much like the earliest, but with considerably better stone work and more specialized cornerstones (figs. 766, 771a). Actually, the method of building doorjambs with cornerstones (e.g., fig. 820b), sometimes with small stone between (e.g., figs. 40, 649b, 734a, 867b), sometimes with only mortar to fill the gap (e.g., figs. 184a, 195), is used throughout the history of Puuc architecture, with continual progress toward better and better stone cutting and fitting (e.g., figs. 205a, 208, 233, 405a).

The large, full-width jamb stones so typical of Puuc building were in use at least by the time of the Initial Series Building at Xcalumkin and possibly earlier. Such construction occasionally made use of a single great stone (e.g., fig. 136d), but more often of two or three (figs. 110, 166, 213a, 260, 645, 727) or even more stones. Once again, as with wall masonry, the cutting and finishing of the jambs improved with time, and with late examples the stone often took on a specialized form that carried a ridge along the back (figs. 360b, 361, 795), presumably to tie the stone more firmly to the hearting of the wall.

An unusual design of doorjambs, except at Uxmal where it is relatively common, is what I call the pilaster variety, where the inner part of the face of the jamb projects forward (e.g., figs. 329, 330, 332, 444). This arrangement is associated with the dragon-mouth entrances so common in the Chenes architectural style (see Pollock 1970) and imitated by the Puuc builders (see Str. 1A1 at Kabah; Outer West Building of the House of the Magician at Uxmal), but it was occasionally used in other contexts, as just seen.

Doorjambs often carry carved decoration, and when they do, the jambs usually are made of large full-width stones. The carving may be on the front edge or on the face of the jamb. Carving on the front edge sometimes copies the banded split columns that are on the facade of the building (figs. 74–76, 726, 758, 893), forms a band of hieroglyphs (figs. 236, 654, 655, 748, 749, 813), or, more rarely, portrays a much-stylized serpent (fig. 799). When the face of the jamb is carved, warriors or other elaborately attired human figures are usually shown (figs. 333, 334, 372, 373, 741, 751, 925), sometimes with glyphic inscriptions. The sculptured doorjamb seems to occur more frequently in the western than in the eastern Puuc sites.

Lintels over doorways were made of both stone and wood, and both materials were used from earliest to latest times in the Puuc architectural development. The choice of material must have been to some extent determined by the width of the doorway, as wooden beams could span a greater distance than a stone lintel, but this could not have been the sole factor since wood was sometimes used when stone could have bridged the opening. By and large, stone seems to have been the favored medium, but at certain sites, notably at Uxmal, many buildings employed wooden lintels. Stone lintels vary largely in size and thickness, some seeming unnecessarily heavy (e.g., see fig. 136d), others daringly thin (e.g., fig. 198). There is also a considerable range in the quality of stone cutting, the shaping and finishing tending to improve over time as was true of the wall masonry. Stone lintels are almost invariably a single great stone, but there are a few instances of two parallel stones bridging a doorway (e.g., figs. 513a, 722). Wooden lintels seem most commonly to have employed two or three beams (e.g., figs. 205a, 283a, 525b), but great single beams are known (fig. 451), and the pilaster-style doorjamb may well have carried four or five beams (fig. 291).

Lintels are often carved in bas-relief on the front edge or the underside, or in one rare instance on the inner edge. Only the front edge may be carved, or only the underside, or both. Most often the front edge carries a glyphic inscription that is part of a band circling the doorway (figs. 236, 748, 813), part of a longer horizontal band (figs. 629, 712, 923, and p. 551), or that is seemingly limited to the lintel (figs. 534–536, 586a, b, 653a, 800). The one example of carving on the inner edges of lintels (fig. 630) is probably of the horizontal-band variety. Although hieroglyphs are the most common subject of carving on the edges of lintels, there are occasional other designs (figs. 255a, 654, 864b, 894).

The most frequent subject carved on the underside of a lintel is a richly attired human or anthropomorphic figure (figs. 255b–d, 523a, 536, 632). Quite often the figure is accompanied by hieroglyphs (figs. 534, 586c, 894, 927). Subjects other than the human figure include glyphic inscriptions (figs. 518a,b, 746), an avian figure sometimes called a "serpent bird" (fig. 751), and a scenic arrangement of two seated figures apparently making an offering, possibly the burning of copal (fig. 752). The only carved wooden lintels from the Puuc that I know of are those found by Stephens (1841, 2:432–433; 1843, 1:178–189, 403–407) and since destroyed. The Stephens lintel from Uxmal seems to have carried only hieroglyphs; the one from Kabah shows a sumptuously dressed human figure.

Doorway columns are most commonly made of two drums (e.g., fig. 21), but columns of a single shaft are not infrequent (figs. 184, 354), and there are examples of columns with three or more drums (see p. 469). Drums and shafts usually show a fairly pronounced entasis, and only occasionally does one find a truly straight-sided column (e.g., fig. 184, right). There is every indication that doorway columns were plastered, and the constriction formed by the joint of two drums, each with entasis, was probably hidden by the plaster. Although columns are normally round in section, other forms occur (e.g., see figs. 302c, 641b, 664a, 708, 917a), in greater number, apparently, in the Campeche than in the Yucatan ruins. The occasional use of rectangular columns or pillars and of masonry piers has been mentioned above.

Doorway columns are at times banded, at times carved in low relief, and rarely are carved in high relief. The banded columns may carry the simple form of band seen so often with the popular split-column facade decoration (figs. 646a, 663, 773b, 910, 929) or the banding may be more elaborate (figs. 601, 602, 605b). The unusual masonry piers from Xcalumkin (figs. 726, 758) also carry the banded split-column design. Low-relief carving is in the form of glyphic inscriptions (figs. 536, 712, 739) or the elaborately dressed human figures seen on jambs and lintels, sometimes with small subsidiary figures (figs. 253, 856), sometimes without (figs. 629, 863a). As seen in the illustrations cited above (and see figs. 254, 630, 790), capitals and corbels are also carved, most often with hieroglyphs. High-relief sculpture on columns, all of it exotic, is rare (figs. 522, 658, 788). The column from Xcochkax seems to have carried a capital with a rounded front, one of the few such pieces that was not rectangular.

WALL OPENINGS, DEPRESSIONS, AND PROJECTIONS ✓

Other than doorways and the windowlike perforations often seen in flying facades and roof combs, the only wall openings used by the Puuc builders were small, usually rectangular ducts or ventilators—sometimes called windows—that normally pierce the wall of a building just below the medial molding (e.g., fig. 709a, b). Such openings are more common in outside walls (figs. 563, 564, 769) but are found also in interior walls (figs. 224, 835b). Occasionally they are located at other levels than below the medial molding (figs. 444b, 445b, 619, 824, and p. 372), and there are rare examples of U-shaped (fig. 399) and round (see p. 349) openings instead of the customary rectangular ones. These ventilators seem to have been used throughout the course of Puuc architecture and in all parts of the area but are, I think, particularly common in the Campeche ruins.

The most common variety of wall depression is the cordholder made of two narrowly separated openings leading to a channel through which a cord could be passed and made fast. This simple device was executed in a number of ways (figs. 62, 146a, 197a, 234, 293, 681b), but, once the wall was covered with plaster, all appeared merely as two holes (fig. 146c). Such cordholders were most often located in a room in pairs at each side of the doorway (figs. 709c, 780c), but may occasionally be found almost anywhere inside a building (e.g., figs. 317, 319c, 342a, 681a). A fastening device that operated on the same principle as the small cordholder, but that was considerably larger and much less frequently found, is a sort of dumb sheave (figs. 266, 776a, 820b).

Almost as common as the small cordholder are hemispheroid depressions a few centimeters in diameter located on doorjambs (figs. 333, 334, 345b, 688a, 771a). The depressions are always duplicated in the same locations on the opposite jamb and seem to have formed rod sockets into which a stick could have been sprung to support a curtain, or possibly to form the horizontal struts of a wicker door or the like. Much larger and very different hemispheroid or conical depressions are occasionally found on the exterior walls of buildings just below the medial molding (see p. 28 and figs. 135a, 136c). They carry traces of paint and seem to have been a form of decoration.

Simple rectangular niches—ranging in size from about .15 to .40 m on a side—are found fairly often in the end and side walls of rooms (e.g., figs. 358, 513b, 524b) and occasionally on an exterior wall (fig. 638). They appear to have been carefully plastered inside. A somewhat more elaborate variety of niche or cupboard is L-shaped or T-shaped in plan (figs. 23, 122, 130, 681a, 683a), and even more complex are a cruciform niche (fig. 41a) and another niche with outer and inner chambers (fig. 41b). This last niche has a rise in floor level to the inner chamber, just as in a full-scale building, and still another has a tiny columnar doorway with capital, corbels, and a molding above the little lintels (fig. 736), again copying a normal-sized doorway. This imitation of large rooms and doorways is reminiscent of the portrayal of miniature houses on the facades of some buildings (e.g., figs. 79, 83; and see Marquina 1951, photos 352, 373–375).

Besides the cordholders referred to above, there are projecting devices that serve the same purpose. Probably the most common is the ring variety, achieved at times by the perforation of a flat, only roughly worked stone (fig. 242a), or heavier, better shaped and finished stones (figs. 524b, 525a, 529), or well-shaped and finished rings, each with a tenon set in the wall (figs. 77, 319b, 651a). More than one kind may, moreover, appear in the same building (figs. 242, 681a). Rings are often set on the inner face of the wall at each side of a doorway (figs. 319, 437b, 771a, 817b), but are also located high on the wall (figs. 242b, 681a, 683c) or on vault soffits (fig. 722). Occasionally they are found on exterior walls (fig. 405a). For the most part the rings are set vertically into the wall, but there are examples placed horizontally (figs. 490, 491, 681a, at right).

Another common projecting device—apparently to make fast a cord or to serve as a hook from which to hang something—is a stone carved to imitate the human foot (fig. 50). Most of these stones are less carefully carved than the one shown in figure 50, but they seem nevertheless to represent the same thing (figs. 56, 266, 305, 354c, 646a). The projecting stones in a vault of the early Structure 3B5 at Oxkintok (figs. 524b, 525a) are too amorphous for me to be sure, but they may well be forerunners of the cordholder in the form of a human foot. I have recorded a single example of a projection that seems to represent a hand rather than a foot (fig. 666a), and another with a scroll carved on the side (fig. 264b). Peglike stones, some only roughly shaped (figs. 166–169), others well finished (e.g., fig. 197b), are found occasionally whereas the supports for stone and stucco decoration that sometimes bristle from upper facades and roof structures (e.g., figs. 65, 135, 205, 354b, 405a, 445, 768, 769) occur with great frequency.

BENCHES

Benches, by which I refer to any raised platforms within a building, are found with some frequency across one end of a room (e.g., figs. 794, 917), but also occur along one side (fig. 3, Str. 1, Rooms 16, 18; fig. 10) or at both ends of a room (fig. 103, Room 2). Although the most common variety of bench is probably the simple raised platform some .25–.40 m in height, shown in the illustrations just referred to, there are several other designs, notably, the L-shaped bench (fig. 174, Room 55), the bench with a recessed center (figs. 165–167, 282, 283a), and benches that are partly hollow beneath and are supported by legs in the form of small masonry piers (see E. H. Thompson 1904, fig. 6, pl. 6:2, p. 15). I know of only one example in the Puuc ruins of a bench that stands free at both ends (ibid., fig. 6, labeled Altar).

A number of benches carry decoration, which may take various forms, such as a simple rectangular molding across the upper edge (figs. 166, 831b, 832b), moldings across the face of the bench at top and bottom (fig. 283a), combinations of moldings with colonnettes (figs. 622a, 678), band elements (fig. 451), and plain and carved colonnettes (fig. 233). The raised floors of Rooms 4 and 5 in Structure 2A2 at Kabah (figs. 322, 329) were probably once benches, each one with a two-member molding across the face. The carved stone faces on the legs of benches at Chacmultun (E. H. Thompson 1904, p. 15) are the only examples of such decoration that I know of.

My work provided little information on the function of these interior platforms that we are calling benches. Beds, seats, daises, altars have been suggested at one time or another. Judging from the variety of design, these platforms almost surely served more than a single function. There is little question that some of them were created to cover a rise in the underlying bedrock and thus were essentially a practical answer to a problem in building. Examples are seen in figures 831b, and 832b, almost certainly in figure 166 (and note the bench in the adjoining room, fig. 165), and in Rooms 16, 18, and 20 of Structure 1 at Labna (figs. 3, 10), where a rise in the bedrock probably accounts for the benches. It is worth observing that, had a wall and doorway divided Room 20, like the wall between Rooms 19 and 21, the bench there would simply be the customary higher floor of an interior room. On the other hand, many interior platforms were clearly designed for purposes other than to cover protruding areas of bedrock. If we are to make comparisons with a much later period—a risky business—many of the benches, and particularly the simpler ones, may have served domestic or at least residential functions (see Pollock et al. 1962, part 3). The more elaborate examples, such as those shown in figures 233 (approached through a doorway surrounded by hieroglyphs), 283a, 451, 622a, 678, and described and illustrated by E. H. Thompson (1904, pp. 15–16, fig. 6, pl. 6:2), could well have been daises or altars, but I know of no evidence that definitively establishes those uses.

VAULTS AND BEAMS

The typical Puuc vault is built of well-faced stone, springs from an overhang, and rises with arched soffits to small corbels that support the capstones (e.g., see figs. 9, 43). The ends of the vault, which also rise from an overhang at the level of the spring, approach the vertical but lean slightly inward (e.g., see fig. 10, Room 19). While the above-mentioned characteristics pertain to the majority of Puuc vaults and represent a sort of norm, design and construction practices actually cover a wide range and suggest development over a considerable span of time. Although we do not have a building stratigraphy to confirm all steps in a chronological progression of masonry techniques, we can tentatively arrange the architectural remains in a logical sequence, some of it supported by actual stratigraphy.

I believe, but cannot demonstrate conclusively, that the earliest vaults in the Puuc area were of the stepped variety. Of the five buildings at Oxkintok that retain standing or partly standing vaults and that appear, through architectural design and character of masonry, to belong to the early period at that site, three are built with stepped vaulting (figs. 479, 480, 501, 524, 525, 528, 529). The other two structures, which are associated with the Initial Series date of 9. 2. ?. ?. ?, have vaults built of rough slab masonry and that vary in shape from straight sided to bottle necked (figs. 508, 511, 513, 516, 517). Rough stepped vaulting that may well be of this same early period is found in the southwest room of the second story of Structure 7 in the North Group at Uxmal (fig. 397a,c), in the South Building of the East Group at Xulmil (figs. 579, 580), in the original part of the West Building in the North Group at Yakalmai (figs. 824, 825), and in the East Building on the Southeast Court at Bakna (fig. 900). The Yakalmai example is stratigraphically earlier than the better cut and fitted masonry that is characteristic of the great preponderance of Puuc architecture. It may be worth noting that the custom of completing the vault before the upper facade masonry was put in place—a practice I have referred to a number of times—was adhered to at this early time (e.g., see figs. 508, 513, 525c, 824).

The use of stepped vaulting and of vaults built of rough slabs seems to have continued for some time after the early period of building we have been discussing. There are, for example, a number of buildings with such early styles of vaulting but whose walls employ facing stone that, compared to that of the early period, is thinner, better cut and fitted, and clearly a step closer to the wall stone eventually developed by the Puuc builders. Examples are seen in figures 562c, 567, 768, 772, 784, 837, 847, 885, 886, 898. I think, moreover, that the underlying structures at Mul-Chic (see p. 278), which are clearly earlier than the superimposed buildings of florescent Puuc style, are of this same design (see E. W. Andrews 1965b, p. 52, fn. 3). One might note that in three examples—those at Kupaloma, Cacabxnuc, and Xcorralche—the spring courses are of dressed stone, possibly an indication of future developments.

An essentially different vault construction, which may or may not be contemporary with that just illustrated, is seen in figures 759, 833, 834, 874b, 876a, and 877. Although the masonry is relatively crude with many spalls between stones that are often poorly faced, the intent was to create a level surface that could be smoothed over with a minimum of plaster. This is in clear contrast to the stepped vaulting that rose in a series of overhangs, or to the slab vaulting that made little pretense at an even surface but depended on a heavy coat of plaster or stucco to achieve that end. The new technique would seem to be the beginnings of the well-cut, dressed, and fitted stone that is characteristic of later Puuc vaults. I have no strong convictions about the period of the particular vaults illustrated above. One must always take into account the possibility of poor or archaic workmanship. The purpose of the illustrations is to show a variety of masonry that preceded, and presumably led to, the fully developed Puuc vaulting.

Whatever the time of introduction of the new technique, and it seems logical that there should be some overlap with the older forms, the continuing development of Puuc vault masonry may be likened to that of wall masonry. In both cases the trend was from relatively heavy, poorly shaped and finished stone that contributed directly to the support of the structure to a finely cut, dressed, and fitted, highly specialized stone that forms the facing on a supporting core of lime concrete. Early forms of the new technique have just been illustrated. Somewhat more developed examples are seen in figures 188, 432, 681a, 820b, 821b, 867b, 868c, 873, and further development, with a mixing of semispecialized and specialized stone, in figures 25, 26, 346, 348, 363, 441, 681b. The end result, a veneer masonry of boot-shaped facing stone, is shown in figures 400, 437, 438b, 881, and in the perhaps somewhat idealized drawings given by Marquina (1951, pl. 239). In its ultimate form even the buried tenon of this specialized stone was carefully dressed (fig. 904). Generally speaking, the trend of increasingly better stone cutting and fitting pertained to corbels and capstones as well as to vault stones, and it should be noted that, in all but the final phase of vault construction, the spring course was of heavier, more deeply tenoned stone than were the higher courses. Lastly, it may be repeated that, from earliest times, vaults were completed prior to the building of upper facades, thus creating a fault, a shear line in the masonry, that has resulted in the fall of countless facades (e.g., figs. 111a, 113b, 144b, 147, 716, 780b, 796, 821a, 838b).

At the beginning of this section I outlined the general characteristics of the typical Puuc vault and went on to say that those features were subject to wide variation. We have just reviewed the several masonry techniques and have touched on the design of the vault, giving attention particularly to what seem to have been early forms. I should like now to give some idea of the range in the design of vaults and how some of them depart from the more normal or standard practices.

That there is great variability in proportion (i.e., of height to width) is readily seen by glancing through the many sectional drawings throughout this report. Figures such as 5, 105, 117, 176, 342, and 352 are useful in showing a number of sections for comparison. It is readily seen that size of overhang at the spring, curve of soffits, pitch of ends of vaults, size of corbels, and width of capstones vary widely. Occasionally the overhang is dispensed with (fig. 602), or rises over a doorway (fig. 294), or the spring is unbalanced (figs. 32, 727), or is even formed by a projecting course of stone (figs. 833b, 874b). The soffit slopes vary from flat (figs. 660, 691, 920), to an almost imperceptible curve (fig. 727), through every degree of curvature to one that approaches the semicircular (figs. 594b, 596a, 645). Parenthetically, vaults of the finest masonry built with highly specialized stone tend to be flat (figs. 398, 437, 438). Stepped vaults are not always stepped at the ends (fig. 885), and the ends of other vaults may omit the customary overhang (fig. 602), may rise vertically (fig. 531), may lean sharply inward (fig. 780c), and may present a curved face or be flat. Corbels beneath capstones are sometimes absent (figs. 508, 602, 768), sometimes at one side only (fig. 32), and sometimes of an odd celtlike shape (fig. 233). The span of the capstones varies greatly and at times capstones are omitted, the vault rising to a point (fig. 195). A vault that differs in design and construction from any other that I know of is shown in figures 308–311. In summary, almost every aspect of the design of the "normal" vault was at one time or another omitted, modified, or substantially changed.

Transverse beams of wood that cross the vault or rest in the walls just below the spring vary widely in number and arrangement. Although their use is almost universal, there are occasional rooms with no beams, and conversely there are some with a great many. Favorite locations are at either end of the room in the spring course or just below it, and in the corbels under the capstones, or just below the corbels. Other frequent locations are at about one-half or two-thirds the height of the vault. A variety of patterns is seen in figures 184, 291, 294b, 358, 359a, 362, 422, and 513b.

MOLDINGS

Medial and cornice moldings are to all intents and purposes universally present on Puuc buildings. The major exceptions seem to occur in connection with the occasional use of sloped upper facades where only a cornice molding may appear (e.g., figs. 301, 348, 601, 615a), and there are very rare instances of buildings of seemingly early design where no molding was used (figs. 525b, 824), unless one considers the entire upper facade to be a heavy apron molding, or the areas above and below sunken panels to be moldings (figs. 526, 826a). Although the vertical facade is standard—indeed, almost the hallmark of Puuc architecture—there are within my experience approximately twenty examples of battered upper facades, so that trait is not as rare as sometimes thought. As just indicated, there are what seem almost surely to be early examples of the sloped upper facade (figs. 479b, 526, 824), and there are other instances where the design is relatively early (figs. 272, 286a, 639a, 721), but it certainly continues sporadically into the fully developed Puuc style (figs. 166, 342, 348, 615).

Medial and cornice moldings show a good deal more elaboration than base moldings but are similar in their frequent use of continuous or intermittent rows of colonnettes. The colonette is far and away the most common decorative element. As might be expected, because of the early collapse of upper parts of buildings, we have many more examples of medial than of cornice moldings. Simply for the sake of an orderly and convenient presentation of the material, but without functional, temporal, or other connotation, I group the moldings by the number of members in each.

Moldings made of a single member are found in two forms, rectangular and apron or beveled. The earliest rectangular examples, of which only medial moldings have survived, are heavy and are usually made of two courses of stone (figs. 513, 898a, 899b). Early apron moldings seem also to have been of two courses (figs. 479, 579b). The most common of all single-member moldings is a rectangular string course, usually of well-cut and faced stone (figs. 65, 309, 445, 712). This type seems to have been restricted mainly to medial moldings. As often as not it rises over doorways (figs. 55, 135, 178), and there is one building where a molding of this variety may have carried a glyphic inscription (fig. 747). Although these moldings of well-cut stone do not seem to be of truly early date, there are indications in a number of instances that they are earlier than the more complicated moldings of the fully developed Puuc architectural style. Lastly, there is the beveled molding of a single member of well-cut and dressed stone, again, I think, found only in the medial position (figs. 392b,c, 393a, 407b). It occasionally carries decorative carving (e.g., see Seler 1917, fig. 88) but neither plain nor carved is very common.

Two-member moldings, of which we have about the same number of examples as those of a single-member, employ rectangular and apron or beveled members in varying proportions and combinations. The earliest surviving example is a medial molding of heavy rectangular lower member and a rough string course above (fig. 508). This same molding, executed in somewhat better faced stone, appears on buildings I believe to be of later date (figs. 768, 769, 885b,c), but still relatively early in Puuc architectural chronology, and on buildings that are probably even later (figs. 852, 853) but still prior to the ultimate Puuc florescence. The equivalent cornice molding of two rectangular members seems to be the reverse of the medial molding, the lower member being the projecting string course (figs. 722, 725, 768, 769, 852, 853, 873b). It may be noted that all these examples are from the western Puuc.

I know of no instance of a molding of two members, of which one is a beveled or apron member, that can be assigned to the earliest Puuc architecture. It is not at all infrequent, however, to find such moldings in the medial position in the later remains (figs. 354a, 393b, 791); some of these moldings are decorated, the crescent, feather, and niche motifs having been observed (figs. 420b, 810, 930). The combination of a beveled and a rectangular member is less frequent as a cornice molding (figs. 405, 445), and here again the cornice reverses the order of the medial molding with an outward-leaning coping in place of the lower apron member of the medial molding. I do not know whether the facade shown in figure 671 should be thought of as carrying a two-member medial molding or not. The apron is all out of proportion to what is usually found, but there is a restricted upper facade or frieze above it. A similar condition may have prevailed on the building shown in figure 681a, but the facade is too badly fallen for me to be certain. There may have been moldings of two apron members (figs. 559b,c, 873b), but here too the record is not clear.

Moldings of three members are by far the most numerous in Puuc architecture. This is particularly true of those in the medial position; three-member cornice moldings are only slightly more frequent than those of four members, although these figures are undoubtedly affected by the destruction of so many cornice moldings. As might be expected, the earliest three-member moldings, most of them medial, are of rectangular members (figs. 562–564, 709b, 717, 718, 725, 829, 838, 887). None is from our earliest period, but all seem to be prior to the fully developed Puuc style, and all are from the western ruins where combinations of rectangular members appear to have been more popular than in the east.

The most prevalent three-member molding, if we include both medial and cornice moldings, is that of a lower apron member, a middle rectangular member, and an upper reverse apron (figs. 205, 301, 416, 639a, 686, 687). At times the middle member is made of crescents (figs. 94, 638, 696c). There are two buildings with phalli projecting from the cornice molding (fig. 457; and see E. H. Thompson 1904, pl. 4:2,3), one example each of a twinning serpent (see Totten 1926, pls. 87, 88:2) and of turtles (see G. F. Andrews 1975, figs. 213, 214) on the middle member, and in at least one instance the lower member is also carved (figs. 74, 75). The molding shown in figure 613b is, so far as I know, unique. For the most part, carved stone decoration on moldings seems to be a product of the mature Puuc style and is more common in the eastern ruins than in the west.

The most popular medial molding of three members, as distinguished from medial and cornice moldings combined, consists of a lower apron member, a decorated second member, and an upper rectangular string course. By far the most frequent form of decoration is the colonnette, which may be either sloped (figs. 44a, 59, 60) or vertical (figs. 123a, 317, 796, 827), and is sometimes arranged in groups with plain areas between (fig. 148). The cornice that usually accompanies these moldings has four members and will be described below. Other decorative motifs common in the second member are the stepped pyramid (fig. 28a) and the zigzag dentate with triangle (figs. 28b, 79, 161), on one building terminated at the corners with highly stylized serpent mouths (fig. 364). Less common are spoollike colonnettes (figs. 220, 326), sometimes alternating with the step-and-fret motif (fig. 98), and we encountered one instance of balls with colonnettes (fig. 589). The twisted rope or guilloche design on the top member is not uncommon (figs. 258, 326, 364b), and there is at least one example of a pleat-and-rosette design on the lowest number (fig. 364b). I know of only one example of a medial molding with a plain middle member between a lower apron and an upper rectangular member (fig. 737), but there may be others. The medial molding shown in figures 141 and 142 seems to be unique.

Medial moldings of four members are very rare. I have recorded only two examples (figs. 178, 201; and see Marquina 1951, photos 379–381) and a third in which a six-member molding changes to four members over the principal doorway of the building (figs. 666, 670). Four-member cornice moldings, on the other hand, are plentiful. Often the cornice repeats a three-member medial molding, but with the addition of an outward-leaning coping (figs. 44, 59, 60, 178 left, 589). The colonnette is again the favored form of decoration (figs. 105, 142, 326), usually in continuous rows but sometimes in groups separated by plain zones (figs. 166, 167). The stepped pyramid (fig. 79) and zigzag dentate (Maler 1902, fig. 16) were used, and there is another example of balls with colonnettes (fig. 589). There are several examples of crescents (figs. 98, 810), one with a rosette; and there is one questionable instance of step-fret and colonnettes (see Totten 1926, pl. 65,3).

We have recorded a few moldings of five members and even fewer of six members. Decoration on these elaborate moldings includes the crescent or linked circle, the twisted rope (both fig. 399), colonnettes (figs. 616, 666, 670, 672, 674), groups of colonnettes separated by plain areas (fig. 672), and a diamond design (fig. 670). The complex moldings and attendant decoration on the Lower West Temple of the House of the Magician at Uxmal are unique (see Spinden 1913, fig. 182; Mexico 1956a, figs. 5, 6; Foncerrada 1965, figs. 15, 42–45; Sáenz 1969, figs. 1–3, photos 9–11).

ROOFS

Somewhat surprisingly, when one considers their vulnerability to weather and vegetation, there are a fair number of roofs or parts of roofs sufficiently preserved to give a good idea of their design and construction. The best preservation, of course, comes from the protection of later, superimposed construction, but there are numerous instances of exposed roof masonry in relatively sound condition, a testimonial to the skill of the ancient builders and the quality of their workmanship.

The typical masonry roof was made of lime concrete of small stone and mortar, laid on the previously constructed vault masonry (fig. 147a). Parenthetically, we recorded only one instance of what may have been beam-and-masonry construction (see p. 72), but other examples could easily have been missed. The upper surface of the typical roof, which carried a camber for drainage and ran flush to the top edge of the coping (figs. 59, 342, 852), was of pure lime plaster and seemingly smoothed to a polish in the manner of floors. Examples of typical roof construction are seen in figures 347, 508, 513, 649b, 768, 824, and 885c. The amount of masonry between the roof and the vault varies widely from building to building, in some instances attaining a thickness of over a meter from underside of capstone to roof surface (fig. 317), in other instances being .30 m thick or less (figs. 681, 820b, 873b). Something like .50–.60 m is probably average. As found today, roofs are almost always white, but I have recorded one example of red (see p. 548), and color, which would have been subject to intense weathering, may have been used more frequently than is now apparent.

On multistory buildings, roofs of lower stories often served as terraces for upper stories, and this undoubtedly called for adjustment of levels, as building progressed, and for renewal of old surfaces. There are at least three superimposed roofs or floor levels above the first story of Structure 2B1 at Sayil (see p. 93). Structure 2A1 at Kabah shows an old roof surface running beneath the building platform of the second story (fig. 323), and on the Lower Temple of the House of the Old Woman at Uxmal a second roof and a roof comb seem to have been added to a building that had previously been without a roof structure (figs. 444, 445, and see p. 254). On the whole, however, we did not observe many alterations in roof design, possibly because so many roofs have fallen or disintegrated.

ROOF STRUCTURES

Roof structures are not uncommon in Puuc architecture. I have recorded nearly fifty examples, though some of them are represented by no more than a fragment of masonry. Both the flying facade, which rose over the front wall of a building (figs. 65, 67, 135, 405), and the roof comb, which was normally located over an interior longitudinal wall, usually a medial wall (figs. 238, 342, 444, 445), were used. My records show about twice as many roof combs as flying facades, but these figures may be deceptive since front walls of buildings are more apt to collapse than are interior walls.

All Puuc roof structures are of the single-wall variety that is frequently thinner at the top than at the base, owing to a series of setbacks (figs. 135, 358). Most of them ran the length of the building as a single stretch of wall, but occasionally they were broken into segments to give a serrated effect (see Proskouriakoff 1946, pls. 16, 20). All Puuc examples appear to have been perforated by windowlike openings, a practice that seemingly was followed both for the structural purpose of lessening the burden on the building below and for aesthetic reasons. Masonry varied from rough stone work that carried a heavy coat of plaster (figs. 68, 134, 240) to finely cut, faced, and fitted stone (figs. 349, 366). Projecting pegs or shelves that supported stone and stucco figures and decorative motifs were common (figs. 135, 405, 433, 444, 445).

The principal purpose of roof structures seems to have been to increase the height and thus the magnificence and grandeur of a building. A corollary was the creation of a field for additional embellishment. Decoration was achieved by moldings (figs. 342, 358, 445), by perforations (figs. 342, 358, 563), by geometric designs in stone (see Stephens 1843, 2:42), and by applied stone and stucco figures and designs, most of which have fallen (figs. 65, 244; and see Maler 1895, fig. 2). As might be expected, considering the apparent purpose of roof structures, there is a high incidence of their use on small buildings that seem to have been temples or at least to have fulfilled a religious function. This is particularly true of flying facades (e.g., figs. 135, 440, 775), but both roof combs (e.g., figs. 308, 309, 342, 358) and flying facades (e.g., fig. 513) appear also to have been placed on buildings not commonly thought of as temples. Any exact correlation of roof structures and temple buildings must await our better knowledge of the function of structures, but I think the association will be striking.

An architectural feature that in some respects resembles roof structures is the column of superimposed masks (figs. 117, 118; and see Proskouriakoff 1946, pl. 18) or other decoration (figs. 178, 205) that rises above the level of the roof. Lastly, there is the possibility that roof ornamentation in the form of crests or *adornos,* a feature usually associated with the Maya-Toltec architecture of Chichen Itza, was sometimes used in the Puuc (figs. 819, 863b, and see p. 504).

DECORATION

Few Puuc masonry buildings were without decoration of some sort. Indeed, if we include moldings, which we have treated separately here but which are, of course, a form of architectural decoration, it is probably safe to say that no building was totally devoid of ornamentation. The favorite areas of embellishment were the upper zone of the facade above the medial molding, the corners of buildings, roof structures when present, doorway areas including jambs, corbels, columns, capitals, and lintels, and less frequently other parts of the lower facade. More often than not, I believe, facade decoration encircled the building, but there are a fair number of examples where the rear was left plain; so many facades have fallen that one cannot always be certain on this matter. Interior decoration, even allowing for the loss of much of it executed in a perishable medium, was far less common, I think, than exterior ornament. The rear wall of a room with a doorway leading to an inner chamber was often treated as a facade of the inner room and as such was most likely to be decorated, but all parts of the room were at times subject to ornamentation.

The typical Puuc architectural decoration is usually thought of as a stone mosaic of split columns, geometric designs, and the so-called masks that portray the rain god Chac. Although this is accurate for much of the florescent Puuc architecture, there are ample indications that stucco modeling played a part in architectural ornamentation and was probably more important than stone in earlier times. Unfortunately, stucco is vulnerable to weathering and decay, not to mention the depredations of man, and only fragments remain of what must once have been a vast quantity of architectural decoration.

The largest amount of stucco modeling I know of was until recently on the upper facade and roof structure of Structure 4 at Labna. Much of this has fallen in the present century, but thanks to the pioneer work of Stephens and E. H. Thompson (see p. 38, above) we have been able to make the restoration, scant as it is, shown in figure 65. Undoubtedly there were once quantities of modeled stucco on the facades and roof structures of Structure 1 at Sabacche (see p. 71), of Structure 3B2 at Sayil (see p. 119), of the Lower Temple of the House of the Old Woman at Uxmal (see p. 256), and the Temple at Chunyaxnic (see Maler 1895, fig. 1), where only traces of decoration now survive. Building after building, far too many to list, where upper facades have survived, show a number of projecting stone tenons that unquestionably once supported decoration. Some of the decoration was of stone but much was of stucco, as is indicated by many fallen fragments and occasional preserved examples, as on Structure A at Mul-Chic (see Piña Chán 1963b, p. 101, and pl. 3) and the North Building of the North Group at Cacabxnuc (see p. 462). Other examples of traces of stucco modeling on upper facades are seen on Structure 1B2 at Sayil (see p. 89), on the south wall of the Lower Temple of the House of the Old Woman at Uxmal (see p. 256), and on the Pyramid Temple at Bakna (see p. 534).

Stucco was occasionally used as decoration inside buildings, as in Structure 1 at Xlabpak (see p. 64) and in Structure 2A2 at Kabah (see p. 168), and aquatic animals were portrayed in relief on the walls of cisterns (e.g., see p. 525, and E. H. Thompson 1897, pp. 10, 12, 14, 15, 17). A few pieces of modeled stucco that may or may not have been architectural decoration are listed under Miscellaneous Sculpture (e.g., Sayil, M2; Kabah, M7; Uxmal, M52–54, 63; and see Pavon 1942, p. 52).

There are many graffiti scratched into the plaster on the walls of buildings, most of them modern and of little interest, but some seemingly ancient. Examples worth noting are in Structures 2C2 and 2C6 at Kabah (see pp. 181, 194), and at Xkichmook (see E. H. Thompson 1898, p. 226). Also of some interest are the names of the early explorers Maler and Aymé (see pp. 167, 168).

Just as frequent as the use of stucco was the use of paint as a decorative medium. Traces of paint are found on dozens of structures, but only rarely have any sizable areas been preserved. Painting seems to have taken a number of forms. There is evidence of overall painting of walls, possibly of whole buildings, in a single color (e.g., see pp. 512, 548). There were murals of processions and scenes framed by simple or elaborate borders (e.g., see pp. 278, 363, 366, 468, 476). The modeled stucco just mentioned seems usually to have been painted, most often, I think, in polychrome. There were bands and columns of hieroglyphs (see pp. 413, 465, 476, 552), genre drawings, possibly games (see p. 241), all done in color or in black and white. Capstones of vaults, usually the center stone, occasionally carried figure painting and hieroglyphs (e.g., pp. 76, 211, 358, 555), and the sockets of vault beams were sometimes circled in red (e.g., pp. 20, 64). Handprints in red were not uncommon (pp. 76, 143, 167, 555). There was undoubtedly a great deal of painting in connection with Puuc architecture, relatively little of which has been preserved.

Far and away the greatest amount of architectural ornamentation that has survived is of stone. As mentioned earlier, the typical decoration of the florescent Puuc style is a stone mosaic of geometric designs and masks. The masks often located over doorways and at the corners of buildings (e.g., fig. 13), and in at least one instance covering an entire facade (figs. 357b, 365), range from an extremely simple, even abbreviated, form (e.g., fig. 34a), to a more complicated, more ornate (e.g., figs. 142, 178, 202a, 289, 371), more naturalistic design (e.g., fig. 13b; and see Spinden 1913, fig. 163). Masks are often superimposed, at times rising above roof level (e.g., fig. 118; and see Proskouriakoff 1946, pl. 18). Possibly the most interesting discovery concerning masks in the present study is that the stone mosaic version, so common in the eastern Puuc sites, seems to be extremely rare in the west. Only at Sisila, Halal, and Itzimte—sites more or less intermediate between east and west—did we observe cut-stone elements of masks in the ruins.

An almost endless array of geometric motifs, most often executed in a mosaic of cut stone, but sometimes carved in bas-relief, adorn the buildings. Particularly common are the zigzag dentate, usually with triangle (e.g., figs. 79, 161), the lattice (figs. 13a, 326), plain or banded split columns (figs. 13, 178), spools (figs. 75, 326), the stepped pyramid (figs. 79, 769), and the fret (fig. 34), and step-fret (figs. 98, 299). Less common are balls (figs. 589, 687), chevrons (fig. 605b), circles (fig. 899b), diamonds (figs. 452, 564), stars (fig. 75), trapezoids (fig. 368), the Greek cross (fig. 563), and a variety of figures difficult to name (e.g., figs. 75, 94). More naturalistic are the basket weave or plait (fig. 34a), crescents representing disks strung together (figs. 75, 178), points that may represent teeth (fig. 414), rosettes and possibly shields (figs. 13, 638), wreathe-like designs (fig. 623), and twisted rope or guilloche (fig. 326), often with pleat or feather (figs. 367, 368).

There is much architectural decoration in stone that is not geometric. Portrayed are: atlanteans (fig. 627, and p. 378), birds and feathers (fig. 420b), Diving Gods (figs. 178, 202b), grotesque heads (figs. 15, 89, and see p. 366), hieroglyphs (figs. 494–499, 715, 747), houses (fig. 79; and see Foncerrada 1965, fig. 9), jaguars (ibid., fig. 40), phalli (fig. 457), serpents (fig. 202b, 289; and see Foncerrada 1965, figs. 38–40), serpent spines (see Sáenz 1969, fig. 3), skulls and crossed bones (figs. 408–412, and see p. 38), Tlaloc faces (see Foncerrada 1965, fig. 42), turtles (ibid., fig. 8), and of course the human form (figs. 30b, 611, 748, 750; ibid., figs. 3, 57; Marquina 1951, photo 377).

A considerable amount of bas-relief and occasionally high-relief sculpture is centered on doorways. Columns, capitals, jambs, corbels, and lintels, all are sometimes carved. Hieroglyphs (e.g., figs. 236, 586, 653–655, 712, 739, 748) and the human or anthropomorphic figure (figs. 253, 255, 334, 372, 373, 522, 658, 741) are the most frequent themes, but other subjects are also portrayed (figs. 254, 751). Lintels were of course made of wood as well as of stone, and the wood was also carved, although few examples survived to be recorded (see Stephens 1841, 2:432–433; 1843, 1:178–179, 403–407) and I know of none that is extant. Lastly, there seems to have been some use of wall panels carved in bas-relief (e.g., figs. 328a, 739b).

Secondary Construction and Building Sequence

I have mentioned in the preface to this book that a survey of the sort we carried out was not well suited to the development of architectural stratigraphy. Many examples of building sequence, more often of the lateral than of the vertical variety, were observed, but all too frequently they shed little light on change or development of architectural style. This lack of useful information was usually due either to so little of the remains being visible that one could not be certain of the styles involved, or to so little change in mode of construction that no meaningful stylistic sequence was suggested. In spite of the limited knowledge of this sort produced by our work, some trends and changes in architectural style emerge.

In preceding pages of this summary I have referred from time to time to early or late features of the architecture. Such assessments of position in the Puuc architectural sequence have appeared for the most part to be on stylistic criteria. There is, however, a certain amount of stratigraphy to reinforce the stylistic development. With very few exceptions (e.g., see pp. 216, 398), omitting minor repairs and alterations, wherever building sequence is discernible, the quality of the masonry, as judged by the excellence of stone cutting and fitting, remains the same or improves from earlier to later construction. This process begins with the early architecture seen in greatest quantity at Oxkintok (see pp. 572, 575, above) and culminates in the superb masonry of a number of structures in the Yucatan ruins (see pp. 572, 576, above). Examples of stratigraphy illustrating the development of masonry techniques are found in Structure 3C6 at Oxkintok (see p. 301, above), in the West Building of the North Group at Yakalmai (see p. 493), apparently in Structure 7 of the North Group at Uxmal (see p. 216), in Structures A and B at Mul-Chic (see Piña Chán 1963b), in the East Building of the South Group at Xcorralche (see p. 497), in the South Building of the Main Group at Kanki (see p. 527), in the West Building at Bobil (see p. 385), in the building northeast of the South Building in the Main Group at Kanki (see p. 524), and in the building north of the West Range of the South Group at Uxmal (see p. 248). The last structure is representative of the finest masonry in the Puuc.

Not stratigraphic in context, but highly suggestive of the terminal phase of the Puuc architectural development, are several unfinished structures we observed. Structure 2C7 at Kabah (see p. 198), the Upper Temple of the House of the Old Woman at Uxmal (see p. 253), and the Unfinished Building at that site (see p. 257) exhibit masonry of the finest quality, comparable to that of the North Building in Group 22 (p. 217), the House of the Governor and the House of the Turtles (pp. 242–243), the West Annex in the South Group (p. 250), and the last building mentioned in the paragraph above, all at Uxmal. Other examples of unfinished buildings are the Northeast Wing of Structure 1 at Labna (p. 11), Structure 2C1 at Oxkintok (p. 310), the Northwest Hilltop Building at Xculoc (p. 383), and the Northwest Building at Xcochkax (p. 396).

I think that the broad trend of masonry techniques and building practices outlined above and under earlier headings in this summary is fairly secure. Some individual structures may be out-of-line but the general trend should hold. I must point out, however, that there are gaps in the stratigraphy. Although it seems clear that the early construction typified by buildings at Oxkintok (pp. 293, 291, 294–301, 305–308), Yakalmai (pp. 491, 492), and Bakna (pp. 535–537), and the stylistically somewhat later buildings at Cacabxnuk (pp. 458–462), Xcorralche (pp. 498–499), and Kanki (pp. 526, 527), for example, predate the well-cut, faced, and fitted wall, jamb, and vault masonry of the florescent Puuc style, we do not have stratigraphy to show that the rough wall and vault construction of the first group of structures just mentioned is earlier than the second group with better wall masonry but equally crude vaulting. We also do not have stratigraphy covering some of the other phases I have outlined in discussing walls, doorways, vaults, and moldings in the immediately preceding sections. Some of this chronological ordering must rest primarily on style.

I have mentioned that the simple rectangular medial molding, which rises over many doorways, seems often to be early in a context of well-cut and dressed stone work. There is stratigraphy to bear this out. Room 5 in Structure 4 at Labna, for example, seems to be earlier than the pyramid and temple building (p. 38). Rooms 23–25 in Structure 2B1, Rooms 1 and 2 in Structure 3B2, and Rooms 1 and 2 in Structure 3C1—all at Sayil—are earlier than adjoining construction (pp. 101, 115-120). The Lower Temple of the House of the Old Woman at Uxmal is almost surely earlier than the higher pyramid and its Upper Temple (p. 256). Each of these earlier buildings or parts of buildings carries a simple but well-cut and dressed rectangular medial molding.

It is most unfortunate that our explorations at Bakna did not include a more careful study of the Northeast Building there. Our brief notes indicate a building with small-stone masonry to which was added a structure with sculptured doorway columns (p. 535). The sequence suggested conforms to what one would expect on stylistic grounds, but it is a sequence about which one would like to know more.

Miscellaneous Sculpture

In an introductory statement to the Miscellaneous Sculpture at Uxmal (p. 264) I have outlined the criteria that determine this category of sculpture. The materials are diverse and difficult to summarize. By far, the greater proportion of the sculptures are of stone, but there are a few is [illegible] pattern [illegible] types of [illegible] [illegible] portrayed motifs appeared on?

pieces of stucco (see p. 580), all of which represent human heads or faces. Much of the sculpture has undoubtedly fallen from buildings and thus was architectural in design and purpose. Other pieces may be monumental in nature. Because the original location or intended use of the sculpture is no longer clear, or is at least open to doubt, these pieces are grouped in the miscellaneous category.

Bas-relief, high relief, and carving in the full round are all present. The most common subject is the human figure, which is most often shown standing, but is also portrayed in other postures. Examples of standing figures, which show great variety in treatment, are seen at Labna (M2–4), Muluchtzekel (M1), Kabah (M1), Tabi (fig. 385), Uxmal (M27, 66–68), Oxkintok (M1, 6, 8, 11), Maxcanu (M5), Xculoc (M1), Cumpich (M1), Calkini (M1, 2), and Chilib (M 2, 3). There are also two atlanteans at Uxmal (M24, 47). Seated and squatting figures are quite common, as seen at Uxmal (M55, 70), Tekax (M1), Xcalumkin (M2, 3), Sisila (M3, 4), Hecelchakan (fig. 839), Xtampak (M1), and Acanmul (M2, 3). Positions seen less often are kneeling (Uxmal, M6), prone (Sisila, M2), and possibly supine (Cumpich, M2).

The human head or face without the body is a common subject. Characteristic examples come from Sayil (M2), Kabah (M2, 4, 5), Uxmal (M14, 15, 51–53, 57, 58, 62, 63), Oxkintok (M5), Maxcanu (M6–10), Santa Maria (M2, 5), Xcalumkin (M1, 4), San Pedro (M4), and Campeche (M4). Another frequent motif shows the human head or face peering from gaping reptilian jaws. Such sculptures are found at Uxmal (M5, 16, 17, 43, 46, 64), Tekax (M2), and Santa Maria (M3). Variations on the theme are a seated human figure in serpent's jaws from Oxkintok (M3), a monkey's face in reptilian jaws from Hecelchakan (M1), and a face in a bird's beak from Campeche (M5). A number of grotesque heads and a gargoyle come from Uxmal (M42, 44, 48–50, 54, 56, 65).

Several animals are portrayed in our category of miscellaneous sculpture. Besides the reptilian jaws just mentioned, serpents are shown in other forms, e.g., at Kabah (M1), Uxmal (M8, 9, 36), and Halal (M2). Birds are portrayed at Labna (M5), Kabah (M3), and Uxmal (M69, 73). Jaguar figures are found at Uxmal (M13, 21, 74), Oxkintok (M9), and X'Castillo (fig. 557c), and monkeys at Becanchen (M1, 2) and Pomuch (M2). The famous Tabi (M1) sculpture shows a deer; there is the head of a peccary attributed to Uxmal (M60); and squirrels or kinkajous come from Labna (M6).

Although phallic representations are not thought to be common in Maya art, there are a good number in the Puuc region. Such carvings have been found at Labna (M1), Uxmal (M37–41), Nohpat (p. 276), San Pablo (p. 375), Almuchil (M1), San Pedro (M5), Kanalku (M2), and Acanmul (M1). Human figures portrayed with phallic emphasis are at Oxkintok (M1), Santa Maria (M1), and Cumpich (M1).

Hieroglyphs appear on some of the sculptures that have been referred to above (e.g., Labna, M5, 6; Tabi, M1; Oxkintok, M6, 11) and there are other fragmentary inscriptions among the miscellaneous sculptures. Examples come from Uxmal (M29–33), Tzocchen (M1), San Pedro (M1–3), Pomuch (M1), Chilib (M1), and Campeche (M3).

Lastly, there is a scattering of stone carvings representing various shapes and subjects, of which we find only one or two examples of each. At Oxkintok (M4) there are two balls, one with glyphs on it, and at Uxmal (M7) an oddly shaped cylinder or drum with carving on its sides. At Uxmal there is also a colonnette (M59) with low-relief carvings of what seem to be deities, and another such carving comes from Maxcanu (M1). There are geometric shapes from Kanalku (M1) and Kanki (M1), a headdress (M28), incense burner (M75), and several masks (M18–20) from Uxmal, and jar shapes from Oxkintok (M2) and Sisila (M1). A ring comes from Sayil (M1) and another from Uxmal (M6), the latter with a human figure in high relief on the outer edge. At Uxmal (M10) there is a large slab, set upright on a terrace, with three holes cut through it, and finally, there are skulls from X'Castillo and Santa Maria (M4), and carvings of skulls and crossed bones from Nohpat (p. 276).

Monuments

STELAE

Seventy-six stelae plus six questionable examples are known from the Puuc area, and I make no doubt more will be discovered (von Euw 1977, pp. 33–67, describes eleven carved stelae not included here). The great majority come from four large sites, Oxkintok (25), Uxmal (17), Sayil (9), and Itzimte (12). Three or four other sites, X-Kukican, Pich Corralche, possibly Nohpat, and Kiuic, have three each; Xcucsuc may have two; Labna, Kabah, Huntichmul, Xculoc, and Bakna have one each, all but the one at Xculoc of questionable identification as stelae. It may be worth noting that, of the fourteen sites listed, nine are in the eastern Puuc; three, Oxkintok, Xculoc and Itzimte, are in an intermediate location; and only two, Xcucsuc and Bakna, are in the west.

At Sayil, Uxmal, and Itzimte the stelae are grouped on low platforms apparently built for the sole purpose of holding them and their attendant altars. This grouping of monuments on platforms seems to be a Puuc trait and probably a relatively late trait. At Oxkintok the stelae are placed in courts and plazas and before important structures more in the manner of the southern Maya cities. Occasionally a stela is located on a causeway; examples are known from X-Kukican and Oxkintok, and possibly Nohpat. In this connection the Monument Platform, Structure 4B4 at Sayil, lies astride the long north-south causeway that bisects that site.

Of the 76 to 82 stelae at present known from the Puuc region, 59 are carved. It is also possible that some of those listed as plain may have carried sculpture that is no longer visible owing to erosion. Broadly speaking, it would seem that the Puuc sculptors were more interested in portraying the human form, often richly attired, than in carving glyphic texts, although there is at least one monument, Stela 17 at Uxmal, that is all glyphic, and another, Stela 4 at the same site, that carries a fair-sized hieroglyphic text. The arrangement of the sculpture into two or more panels, each panel representing a separate scene, is not uncommon on the stelae. Proskouriakoff (1950) has discussed the several styles of sculpture.

ALTARS

In the description of ruins I have made specific reference to almost 200 altars from some 30 sites and have made a number of general estimates such as "several," "a number," or "many" altars at about 15 sites. All these figures indicate is that such monuments were numerous and widespread throughout the Puuc ruins. Undoubtedly there are many altars that are badly broken, buried beneath debris, or hidden in thick vegetation that we did not recognize or see, and so, even if we had specifically listed all that came to our attention, many would still remain uncounted.

As might be expected, altars are often associated with the more important structures or groups of structures (see pp. 135, 201, 322). Where stelae are clustered on platforms, as at Sayil and Uxmal, but not at Itzimte, there may also be concentrations of altars (pp. 131, 132, 218). Small masonry platforms in courts before buildings seem often to have carried these monuments.

Altars vary widely in size and shape (e.g., see figs. 278, 382), running from about .20 m in diameter and height to over 1 m in diameter and nearly 3 m high (fig. 471). By far the greater number of altars are round, an inverted truncated cone, and I have divided round altars into drum and column varieties (see p. 135), a distinction that may or may not be significant. Generally speaking, the column variety is the more popular, but at Oxkintok the reverse seems to be true (figs. 549, 550). A less common shape is the rectangular altar, which is found mainly in the Campeche ruins (e.g., figs. 763, 890b–d, 902).

About 40 of the nearly 200 altars we recorded are carved, and another 25 may have been carved but are too weathered for us to be certain. The most frequent design is the twisted rope (e.g., figs. 382e, 383), often with feather or pleat motif (figs. 473, 551, 552). The inverted tau or stepped pyramid is known (fig. 382h), and there are panels of a braid or mat design (figs. 551b, 763b). Glyphic inscriptions are found occasionally (figs. 102b, 379, 472, 475), as are examples of figure carving (figs. 102b, 379–381, 384, 550), but altars do not seem to have been a favored vehicle for this genre of sculpture in the Puuc.

11 · Architectural Style and Chronology

Architectural Style

At the outset of the Introduction I called attention to the several meanings that the term Puuc has acquired in archaeological writing. One of its frequent uses is to name a phase or period in the culture history of the northern Maya area, and a further use is to denominate an architectural style that apparently flourished during that period. I believe that anyone who has labored through the descriptive matter in this book, or who has read only the Summary and glanced through the illustrations, must be aware that more than a single architectural style is represented, and that there is every indication that the building remains are of more than one period. This clearly calls for discussion and clarification. I should like first to outline several styles of architecture arranged in a developmental, and what I believe to be a chronological, order. We can then examine the place of this sequence of styles in the chronology of the northern Maya area. The brief descriptions that follow are, of course, given in detail under each structure in the main text, and there is further comment in the immediately preceding chapter.

EARLY OXKINTOK

What seem to be the earliest remains about which we have sufficient knowledge to identify an architectural style are found in greatest number at Oxkintok, and for that reason I am calling the style Early Oxkintok. Examples are Structures 1B1, 3B1, 3C5, 6, 3B5 at Oxkintok (figs. 479, 480, 500, 501, 507–518, 524–529), the South Building of the East Group at Xulmil (figs. 579, 580), the original part of the West Building in the North Group at Yakalmai (figs. 822–828), and the East Building on the Southeast Court at Bakna (figs. 899, 900). Base moldings are simple or nonexistent. Walls are built of rough block masonry. Doorways are simple rectangular openings. Vaults are of rough slabs, most often stepped, but also straight sided and bottle necked. Upper facades were either sloped and without moldings—in effect a single great apron—or they carried heavy rectangular and apron moldings in the medial and cornice positions. There are remains of flying facades and roof combs. No decoration survives but it undoubtedly was of stucco. In two instances, Structure 3C6 at Oxkintok (see p. 301) and the example at Yakalmai (p. 493), this style of architecture is seen to underlie buildings constructed of better cut and faced veneer masonry.

PROTO-PUUC

A style of building that I believe to be next in order of time I am calling Proto-Puuc. It represents a transitional phase that seems to have its origins in the Early Oxkintok style but also looks forward to later Puuc forms and practices. Examples are the North Building in the North Group at Cacabxnuc (figs. 766–772), the Building with Stepped Vault at Chelemi (figs. 783, 784), the East Building in the South Group at Xcorralche (figs. 835–837), the West Building in the North Group at Xkastun (figs. 846, 847), the South Building in the Main Group at Kanki (figs. 885, 886), the West Building on the Southeast Court at Bakna (fig. 898), probably Structures A and B at Mul-Chic (see Piña Chán 1963b), and possibly the Eastern Building at Kupaloma (figs. 562–567). I say "possibly" in the last instance because a finely cut spring course of the vault and certain cut-stone decorative features seem to be stylistically somewhat advanced for this time.

Base moldings are simple but somewhat better finished than in the preceding architectural phase; walls are of a true veneer masonry, the stone usually small or irregular in size; doorways are simple and with jambs of the cornerstone and small-stone variety but with an occasional full-width stone; vaults differ little from the Early Oxkintok phase—possibly with less emphasis on the stepped vault—but in two or three instances (figs. 567, 772, 837) the spring courses are of better cut and dressed stone; upper facades seem to have been vertical and with one-, two-, and three-member, often heavy, rectangular moldings; roof combs and flying facades were in use; decoration, of which little remains, seems to have been mainly of stucco but with simple geometric patterns worked out with wall stone. Unfortunately, we found no instance of building stratigraphy showing the Early Oxkintok style to underlie the Proto-Puuc, and our sequence here is strictly stylistic. There are, however, two examples, those at Xcorralche and at Kanki (see above), and the questionable examples at Mul-Chic (see above) that show the Proto-Puuc style to underlie structures built of a better quality of veneer masonry.

There are several examples of buildings that conform closely to the style just described except for the construction of the vaults (figs. 759, 833, 834, 874–877). The vault masonry is of roughly shaped, poorly fitted stone, more blocklike in proportion than that previously seen, with the exposed ends crudely dressed in an effort to present a smooth, or at least level, soffit (see p. 576). One might think of this vaulting as the progenitor of the characteristic veneer masonry of later Puuc vaults. Other than the vault construction these structures rather closely follow the Proto-Puuc style of building, and I am inclined to include them in that style, possibly a late version.

EARLY PUUC

As might be expected, the mature Puuc architectural style shows a diversity and elaboration not previously seen. There is no reason to think this came about suddenly, however, and I think one can identify a number of structures that belong to an Early Puuc style. These buildings for the most part employ a well-developed masonry technique but are modest in scale and with little of the cut-stone (mosaic) decoration that characterizes the later architecture.

A mode of building that seems to be an outgrowth of the Proto-Puuc style but that incorporates some important new features is seen in the Initial Series Building (figs. 703–715), the South Building on the Initial Series Court (figs. 716–719), and the First Addition of the Northwest Building in the Main Group (figs. 720–725) at Xcalumkin, in the West Building in the Hilltop Group at Haltunchon (figs. 775–777), the Building with Paintings at Chelemi (figs. 779–782), and the East Wing of the Building of the Glyphic Band at Xcocha (figs. 851–858). Other probable examples, but about which information is incomplete, are the North Building in the North Hill Group (figs. 731, 734), the Middle and South Buildings in the Hieroglyphic Group (figs. 708b, c, 735, 739–753), and the South Building on the Court North of Road in the North Group at Xcalumkin (fig. 757), the East Building at San Pedro (fig. 787), the North Building on the East Court in the South Group at Xcucsuc (figs. 820, 821), the South Building in the Main Group at Bolonchoch (fig. 873), and the building with partly standing facade in the North Group at Kanki (fig. 887).

Base moldings are still of a single member but are generally of better cut and dressed stone that is at times extremely well finished. Walls are of veneer masonry that varies from the small-stone variety seen in the previous Proto-Puuc style to normal-size wall stone that is at its best very well cut, faced, and fitted. The simple rectangular doorway persists, as it does throughout the Puuc architectural development, but doorway columns first appear at this time and jambs begin to be built of large, full-width stones, although the small-stone variety continues. Vault masonry, which varies considerably in quality, has clearly reached the veneer stage that utilizes semispecialized stone but not the boot-shaped stone of late times. The offsets at the spring and beneath the capstones of the vault, so typical of Puuc buildings, are almost invariably present. Upper facades are vertical, and moldings of one, two, or three rectangular members, quite like those of the Proto-Puuc style but mostly with better stone cutting, continue. In one instance (fig. 873) there is the suggestion of a beveled molding. Roof structures, both roof combs and flying facades, are common. They are faced with dressed stone and, where enough remains to indicate the design, are perforated. Decoration seems to have featured low-relief carving on columnar doorways and modeled stucco on upper facades and roof structures. Almost no modeled stucco decoration has survived. There are occasional simple designs worked out in cut stone but the ubiquitous masks of later times are notably absent.

There is a small amount of building stratigraphy associated with this Early Puuc style, namely, in the Northwest Building in the Main Group at Xcalumkin, the Building of the Glyphic Band at Xcocha, and the South Building in the Main Group at Bolonchoch, but it is not very helpful in relating the style to earlier or later work. Its placement in our sequence is primarily stylistic but of course takes into account the Xcalumkin date (see p. 419).

Some buildings that seem to represent an early phase of the mature Puuc style have in common a nicely cut, rectangular medial molding of a single member that often rises over doorways. Examples include the temple buildings Structure 4 at Labna (figs. 64–71), Structure 1 at Sabacche (figs. 132–136), and Structure 3B2 at Sayil (figs. 237–244). Other buildings are the buried part of Room 58 (figs. 8, 11), Room 50 and adjacent rooms (figs. 33, 39), and the South Wing (figs. 53–57) of Structure 1 at Labna; Rooms 23–25 in Structure 2B1 (figs. 173, 176–178, 181a, 189a), and Rooms 1 and 2 in Structure 3C1 (figs. 246, 247) at Sayil; Structure 1A5 at Kabah (figs. 300, 304, 305), the Building with the Inscription at Huntichmul (figs. 584–586), the southwest room of the second story of the Main Building at Halal (fig. 924), and very possibly the Lower Temple of the House of the Old Woman at Uxmal (figs. 442, 444–447), although that structure carries a three-member base molding in contrast to simple base moldings on all the other examples.

Details of design and construction of these buildings are very like those of the preceding group of structures, the major differences being the consistent use of a relatively light well-cut medial molding, at times rising over doorways, roof structures of rough stone and stucco as well as of faced stone, and only one example of carving associated with a doorway. In contrast to the other group of buildings, there is a fair amount of stratigraphy. Five of the twelve examples clearly underlie later Puuc construction, and four more are probably earlier than adjacent buildings, though not demonstrably so in the absence of excavation.

An architectural design that may be earlier than the mature Puuc style features a battered upper facade. Examples are the South Room of Structure 4C1 at Sayil (figs. 272, 273), the buried wall between Rooms 14 and 15 in Structure 1A1 at Kabah (figs. 282, 286), the early part of the Western Building at Bobil (fig. 639a), the Original Building in the Northwest Building in the Main Group at Xcalumkin (figs. 720, 721), and possibly the North Building in the Main Group at Xtampak (figs. 867, 868). It should be emphasized that battered upper facades are not in themselves a diagnostic feature of the Early Puuc style, the design being found both earlier (see p. 577, above) and later (e.g., see figs. 340–342, 348, 349), but the stratigraphic position, along with certain architectural features, suggests that the remains listed above are of Early Puuc date. It is important to note that all examples except the last underlie later construction.

LATE OR CLASSIC PUUC

This is the style of architecture that is simply called Puuc or sometimes classic Puuc in virtually all writing on Maya architecture. It is so well known that one hesitates to describe it again. Examples abound in the Great Cities, throughout the eastern Puuc ruins, and are found more sparingly in the western Puuc. It is the time of large building complexes such as Structure 1 at Labna (figs. 3–57), Structures 2B1 (figs. 172–210) and 4B2 (figs. 257–267) at Sayil, Structures 1A1 and 1A2 in the Northwest Group (figs. 282–299) and Structures 2C2, 2C3, 2C6 in the East Group (figs. 335–373) at Kabah, and the Nunnery Quadrangle (p. 231), the House of the Governor (p. 242), and the South Group (p. 246) at Uxmal, to name some outstanding examples. There are, of course, many smaller structures throughout the Great Cities and at endless smaller sites, many of which buildings have been described on preceding pages.

Although the simple base molding continues—eventually to be executed in beautifully cut and finished stone work—moldings of more than a single member become common, the three-member style, usually with colonnettes in the middle member, being particularly popular (see pp. 570–571). Wall masonry varies from moderately well-cut and finished to superbly dressed and fitted stone, at times even selected for color and quality. The most advanced technique employs thin, tilelike stone, sometimes very large (see pp. 571–572). Doorways vary from the Early Puuc style mainly in employing the column more frequently and in the greater use of wood for lintels, which allow a greater span. The full-width jamb stone is normal at this time, taking on, in its ultimate development, a specialized shape with a ridge down the back, but small-stone jamb construction is also used (see pp. 572–574).

Vault masonry parallels that of walls in varying from the use of only slightly specialized, moderately well-cut and fitted stone to beautifully shaped, fitted, and finished, boot-shaped stone that is the equivalent of the finest veneer wall masonry. Contrary to the oft-expressed idea that the typical Puuc vaulting is of boot-shaped stone, the great majority of vaults employ a mixture of stones that are roughly triangular in section or in the form of a slantingly truncated loaf. These shapes are at times mixed with forms suggesting the boot shape, but it is only very late in the development of Puuc architecture that the true boot-shaped vault stone appears (see pp. 575–576).

The vast preponderance of facades are vertical, but there is occasional use of the battered upper zone. Moldings undergo great elaboration compared to earlier forms, and the beveled molding, both as apron and reverse apron, comes into widespread use. Moldings of three members in the medial position and of four members at the cornice are particularly common, as is the colonnette as a decorative motif, but many examples of two-member moldings exist, and there are instances of five and six members. Besides the colonette, a number of geometric patterns decorate both medial and cornice moldings (see pp. 577–578). Roof structures are quite common and are nearly always perforated and faced with dressed stone. Roof combs seem to have been more popular than flying facades, but both were used (see p. 579).

Architectural decoration shifts dramatically from the general use of modeled stucco in earlier times to a technique of cut stone that is one of the hallmarks of late Puuc architecture. Most typically the upper facades of buildings carry a mosaic of split columns, geometric designs, and Chac masks, but lower facades are also embellished with some frequency, and roof structures are decorated. Low-relief carving in association with doorways continues sporadically, and there is some carving in the round, possibly more than has generally been recognized. An indeterminate amount of stucco modeling and painting existed, though little of either has survived (see pp. 579–580).

Instances of building stratigraphy have been mentioned in preceding pages. One wishes there were more. The important thing is that, wherever stratigraphy was observed, this late Puuc architecture either was on top or was overlaid by construction of the same style (see p. 581). I suspect that a fuller knowledge of Puuc architecture might lead to dividing my Late Puuc style into two phases, perhaps to be called Middle Puuc and Late Puuc, in which Middle Puuc would include the bulk of the remains in my Late style, and Late Puuc would be represented by the several unfinished structures described here, as well as some of the finest of the completed buildings. I do not think, however, that our present knowledge is sufficient to make this distinction with any assurance.

REVIEW AND COMMENT

I want briefly to review and comment on the sequence of architectural styles outlined above. Although there is some building stratigraphy to guide us, the sequence is based largely on my interpretation of changing and developing architectural style. I am well aware of the chance for error in any such approach, and the pitfalls are made doubly hazardous by my considerable reliance on masonry technique as a developmental and chronological guide, a reliance dictated by the fragmentary condition of so many of the ruins. Assuming the correctness of the fundamental concept of a developing masonry technique that changes over time from crude to excellent, and I think the weight of evidence shows this to be true, one is still faced with the possibility that any single example may not reflect its chronological position correctly. To put it another way, a builder may be behind or ahead of his time, and the masonry may be the product of either novice or expert mason. Obviously we must rely primarily on the broad trend and must recognize the chance of error in the chronological placement of any one structure.

Another problem one must face when dealing with architectural style and chronology is that of a conscious archaism on the part of the builder. Architects have copied earlier forms in other cultures, particularly for ceremonial and religious structures, and there is no reason to believe that this was not done by the Maya. Examples might be the temples at Labna (Structure 4), Sabacche (Structure 1), and Sayil (Structure 3B2), seemingly of Early Puuc date at sites where most of the architecture is Late Puuc. One wonders if these temples may not be later than their style indicates.

In assessing the reliability of the stylistic sequence as I have outlined it, I have little question that the Early Oxkintok style represents our earliest remains. I also feel secure in placing the Late Puuc style at the end of the sequence. I feel less certain in dealing with the intermediate Proto-Puuc and Early Puuc styles. Judging from information currently available, I think my arrangement is the most logical, but what I have called two distinct styles may prove to be different aspects of a single style, and the differences in time that the remains suggest to me may be more apparent than real. Architectural excavation and ceramic studies could presumably resolve these uncertainties.

Chronology

Any attempt to place the Puuc architectural sequence in time can yield only tentative results owing to the meager data available. I have called attention in the Preface to the shortcomings of our survey in establishing architectural chronology. The ceramic studies that can unquestionably

Time A.D.	*Period*	*Puuc Architectural Sequence*	*Inscriptions and Other Tentative Dates*
1500			
1400	Decadent or Late Postclassic	*(traces?)*	
1300			
1200			
1100	Modified Florescent or Early Postclassic		
1000			
900	Pure Florescent or Terminal Classic	Late or Classic Puuc	Uxmal 905 Uxmal 900 ± 130 Kabah 879
	(Tepeu 3)		Labna 862 Oxkintok 849
800			
	(Tepeu 2)		Uxmal 760 ± 80 Oxkintok 751
		Early Puuc	Xcalumkin 744 and 731-71
700	Regional or Late Classic		Sayil 730 ± 80
	(Tepeu 1)	Proto-Puuc	Uxmal 674 Uxmal 649
600			
			Uxmal 590 ± 50
	(Tzakol 3)	Early Oxkintok	
500	Early Period or Early Classic		Oxkintok approx. 475
	(Tzakol 2)		
400			
	(Tzakol 1)		
300			
	Formative or Preclassic		

Figure 934. The Puuc architectural sequence. Dates follow the Goodman-Martinez-Thompson correlation. Chart is based on those by E. W. Andrews IV (1965a), Brainerd (1958), and Sabloff et al. (1975). Radiocarbon dates are corrected from Damon et al. (1974) tables (see p. 562, above).

supply at least the broad framework of the Puuc chronology have seen only a beginning, with much remaining to be done. Major sources are Brainerd's (1958) posthumous report, which includes an analysis of pottery from six Puuc sites, and R. E. Smith's (1971) study of ceramics from limited excavations of two of the same sites. Both are helpful, but because of their preliminary nature they leave a number of questions unanswered, particularly in associating pottery with architectural style. What we have, then, in trying to place our architectural sequence in the chronology of the northern Maya area, are a small amount of building stratigraphy, a number of dates of varying degree of reliability, and some helpful but still insufficient ceramic associations. There follows a chronological arrangement of the architecture that seems to me best to conform to the all-too-loose constraints of our data (fig. 934).

I know of no building remains from the Puuc area that date from Formative times. This does not mean that such remains may not be found in the future, but the scarcity of Formative ceramics in collections from the Puuc—except for those from Xcalumkin (Brainerd 1958, pp. 32–33; but see Matheny and Berge 1971)—suggests that human occupation of this waterless region was light and quite possibly intermittent (but see Brainerd 1958, p. 26, fn. 21).

EARLY OXKINTOK

In Structure 3C6 at Oxkintok there is a doorway lintel carved with the incomplete Initial Series 9.2. (ca. A.D. 475). The doorway is one of the quite rare examples that employed two parallel stones to form the lintel. The carved stone rests to the left (north) as one looks up at it, holding the Introducing Glyph at the top, and the now-missing parallel stone would have lain to the right. One supposes that the remainder of the Initial Series was on the missing stone. The carved stone that remains does not fit the doorway very well, the top of each jamb slightly overlapping the carving, though not so much as to impair the reading of the inscription. This poor fit has raised doubt whether the building and lintel are contemporaneous. There is a good chance that lintels were from time to time reused and it certainly could have happened in this case. If, on the other hand, the inscription covered two stones, as seems likely, the chances are great that the lintel was designed for the doorway where the remaining part now rests. The question cannot be answered with finality.

The broken and badly preserved Stela 4 at Oxkintok stood before Structure 1B2, a pyramid with a fallen building at the top. The structure appears to have been of the early style at the site, and this identification is reinforced by the presence, a short distance westward of Structure 1B1, a building of unquestionable early style. The upper half of Stela 4 is lost, and there is no decipherable inscription, but Proskouriakoff (1950, p. 110) thinks the art style of the figure on the front of the monument probably dates from the Early Period. If so, this is the only stela at Oxkintok that appears to be early.

In his trenching for pottery at Oxkintok, Brainerd (1958, pp. 13–15) encountered a deep deposit that produced sherd material with close analogies to Tzakol 3 ceramics of the southern Maya area. This is the equivalent in time of the last part of our Early Period (see fig. 934). The pottery was not specifically associated with any structure, but Brainerd believed it clearly marked an early occupation of the site and was presumably contemporary with the early style of architecture there. Needless to say, there are later buildings, later sculpture, and later pottery at Oxkintok. Elsewhere in the Puuc area, Tzakol or Tzakol-like pottery has mostly been found in small-to-trace amounts, though in quantity in the Chac cave (see Brainerd 1958, fn. 23; E. W. Andrews 1965c). It would seem that these early people had yet to master the artificial storage of water in any amount and were mainly dependent on natural sources.

I think we must conclude that the information at present available does not allow us to date with certainty the early style of architecture at Oxkintok or elsewhere in the Puuc area. To my mind the evidence is least strained by placing the style toward the end of the Early Period, and I see nothing in the architecture that militates against that date. Whether the Initial Series in Structure 3C6 records the time of construction of the building, I do not know. Purely on stylistic grounds, I am inclined to place Structures 3C5 and 6 at Oxkintok late among the examples of Early Oxkintok style that I have listed (p. 584), but it is a most tenuous opinion and in relation to the Initial Series lintel can be interpreted either to make the architectural style earlier than I suggest or to indicate a reuse of the lintel in its present location and hence a later date for the building than the inscription indicates.

Before leaving this discussion of the time of the Early Oxkintok style, I should mention the radiocarbon date of A.D. 590±50 from Uxmal (see p. 211) that falls at the very end of the Early Period (fig. 934). The sample comes from a wooden lintel in the Lower West Temple of the House of the Magician, a building apparently of a style (Late Puuc) much later than the date would indicate. We have noted that lintels seem at times to have been reused, and that could be the situation here, particularly as there are traces of remains at Uxmal that might date from the Early Period. There is also the possibility of error that goes with any radiocarbon reading. Whatever the explanation, the date does not seem to be contemporary with the structure from which the sample comes.

PROTO-PUUC

At the end of the preceding section (Review and Comment) I expressed some uncertainty whether the Proto-Puuc should be considered a separate style or merely an aspect of the Early Puuc style. I have made the distinction because the Proto-Puuc seems to me sufficiently different from the Early Puuc to merit its being considered a separate style, and because it seems to carry transitional features that give it an intermediate position between Early Oxkintok and Early Puuc. We have no data, either glyphic or ceramic, that directly date the Proto-Puuc remains. It is their transitional character, as just seen, that leads me to place them where I do (fig. 934). Should my dating of Early Oxkintok be too early, then Proto-Puuc will have to move up in time and, under those conditions, had probably better be considered an aspect of the Early Puuc style, which seems to be fairly well anchored chronologically.

The two dates from Uxmal that fall in this period appear unfortunately to have little bearing on the Proto-Puuc style. The earliest, A.D. 649, is from an inscription on the rings of the Ball Court, a supposedly Late Puuc structure (see p. 209). The second, A.D. 674, is a documentary date recording the depopulation of the town (see p. 212). It may be noted that there are Chenes remains at Uxmal (see Pollock 1970, pp. 66–80), and it is possible, I suppose, that the Ball Court inscription recalls some happening of that earlier time and that the documentary statement, "the town of Uxmal was depopulated," refers to conflict between the Chenes and later Puuc peoples. This is, obviously, the purest of speculation.

EARLY PUUC

We are fortunate to be able to date the Early Puuc style, or at least one aspect of that style, with some assurance. I have in mind, of course, the Initial Series date of A.D. 744 at Xcalumkin. Although this inscription has been read in a variety of ways (see p. 419), I think the reading given here is now generally accepted as correct. The inscription was built into the wall and vault of the structure (see p. 424), having quite obviously been designed for that location, and there is consequently every indication that it dates the building. This conclusion is strengthened, moreover, by the possible recording of dates from about A.D. 731 to 771 at other structures quite similar to the Initial Series Building (see pp. 441, 447). Stela 20 at Oxkintok, possibly recording the date A.D. 751 (see p. 282), seems to be of this period but has not been associated with any architectural remains. Once again the radiocarbon readings of A.D. 730 ±80 from Sayil and A.D. 760±80 from Uxmal appear to be too early for buildings of a Late Puuc style of architecture, from which I think the samples come (see pp. 86, 211).

It has probably been noticed that all the examples of structures similar in style to the Initial Series Building at Xcalumkin are in the western Puuc (see p. 585). Other buildings that differ mainly in their treatment of moldings or of the upper facade (see pp. 585, 586) are most commonly in the eastern Puuc. No direct dating is available for these structures, but there is considerable stratigraphy showing the buildings to underlie Late Puuc construction. It is a combination of this stratigraphy and architectural style that leads me to place the remains in Early Puuc times. The question is, of course, how much time elapsed between the earlier and later construction. If the time interval was short, the earlier buildings could be of Late Puuc date. I have placed them earlier for reasons just stated, but the evidence is scant and they certainly could be later.

Our knowledge of the ceramics of this time in the Puuc area leaves much to be desired. R. E. Smith (1971), dealing with material from Kabah and Uxmal only, finds a virtual absence of such remains. Brainerd (1958), with the benefit of pottery from two more sites in the eastern Puuc and from Oxkintok and Xcalumkin in the west, seems to feel that there are remains from this time in both the eastern and western Puuc, but in very limited quantities in the east. The chultun system, which unquestionably made the later heavy population of the Puuc possible, was widely used at Xcalumkin apparently in Early Puuc times and, it is reasonable to assume, had at least started to be used in the east. Indeed, we know there are remains underlying Late Puuc construction in the eastern sites (e.g., at Uxmal and Mul-Chic) and it is surprising to me that more Regional Period pottery has not been found. My guess is that the immense building activity of Late Puuc times so submerged any earlier remains that, in all but the occasional fortunate situation (e.g., Mul-Chic), it will require a carefully directed search to uncover them.

LATE OR CLASSIC PUUC

As previously mentioned, this is the architectural style that is generally known simply as Puuc or as classic Puuc. It is found in quantity throughout the Puuc area and beyond, but is particularly concentrated in the eastern Puuc. The dating of the style in the Pure Florescent or Terminal Classic Period (see fig. 934) is, I think, quite generally accepted, and I see no reason to disagree. The few as yet deciphered inscriptions on buildings of this style at Labna, Kabah, and Uxmal (fig. 934) provide dates that fall about where one would expect them to. All these readings are open to question, but the radiocarbon date of A.D. 900±130 at Uxmal lends some support to their accuracy. In the final analysis, the assignment of the architecture to the Pure Florescent Period rests mainly on the ceramic associations (see R. E. Smith 1971; Ball 1974; Ball and Andrews 1975).

The End and After

There are indications that classic Puuc civilization ended suddenly and at its peak. This is generally thought to have happened at some time—probably late—in the tenth century. Except for a scattering of decadent remains (see below), building activity seems simply to have ceased rather than to have continued in the old style or to have taken on new directions. The existence of several partly completed buildings, each employing an advanced and apparently late masonry technique (see pp. 11, 198, 253, 257, 310, 383), suggests a climactic termination to what had been a thriving architectural tradition. A somewhat similar picture is presented by the ceramic remains. In the Puuc area the typical Pure Florescent pottery ceases to be made and is not replaced by the later ceramics that are known from elsewhere in the peninsula (see R. E. Smith 1971). Our knowledge of Puuc pottery leaves much to be desired, but what we know seems to confirm the architectural evidence of an abrupt termination of classic Puuc culture.

I know of very few architectural remains that could be considered to date from a time after the end of classic Puuc civilization. Possible examples are the hollow, rounded secondary constructions in Room 9 of Structure 2A1 at Kabah (see p. 167), which could be products of the Decadent Period or even of Colonial times. I have speculated on the possibility that the upper story of Structure 6 in the North Group at Uxmal is of late date (see p. 216). The evidence—which consists of rough masonry construction, not unlike that seen at Mayapan, overlying normal Puuc masonry—is shaky at best, and the identification of the building as late must be taken as a suggestion only. Other examples at Uxmal of what may be post-Late Puuc structures are the remains found above the floor in the court of the Nunnery Quadrangle (Ruz 1955a, pp. 50–52), and the small platform excavated by Ruz in front of the House of the Old Woman (see p. 256, above). Since in the course of these excavations Ruz found pottery and other artifacts that appear to be late, the dating of the remains would seem to be on firmer ground.

Some years ago, the late E. W. Andrews IV (1939, 1943, pp. 82–87) called attention to a group of non-Maya sculptures that he believed to date from post-Puuc Florescent times, and I am inclined to agree with him, although not necessarily for the same reasons. Some of the sculptures he mentions are from the Puuc area, and to his list may be added Sculpture M2 from Cumpich (see p. 457), apparently a companion piece to M1, which Andrews includes. Whether certain phallic representations should be included with the Andrews group of sculptures is open to question. The Maya of classic Puuc times used the phallic symbol as an architectural element (e.g., Phallic Temple at Uxmal, p. 262; Str. 1 at Chacmultun, p. 365), but the exaggerated nature of sculptures such as M1 at Labna (see p. 51), M37–41 at Uxmal (p. 267), M1 at Almuchil (p. 417), and M1 at Acanmul (p. 541) seems to ally them with the Andrews sculptures.

There are probably a number of non-Maya and possibly late sculptures scattered about the Puuc area. The sculpture of the "Old Woman" at Uxmal (M27, p. 267) is an example. Sculptures M1 and M2 from Becanchen (see p. 375) are others. Although terribly weathered, Sculptures M2 and M3 at Xcalumkin (p. 454) strike me as suspiciously non-Maya. To those might be added Sculptures M2 and M3 at Acanmul (p. 541). This list is by no means exhaustive, and there are undoubtedly examples not yet recorded. In sum total, however, currently known remains that postdate the classic Puuc culture—and the examples above are by no means surely of that time—are scarce.

List of Ruins

ACAMBALAM 350
ACANMUL 537
AKIL 84
ALMUCHIL 406
BACABCHEN 501
BAKNA 533
BECAL 500
BECANCHEN 374
BOBIL 384
BOHOLA 544
BOLONCHENTICUL 558
BOLONCHOCH 519
CACABBEEC 530
CACABXNUC 458
CALAKMUL 543
CALCEHTOK 336
CALKINI 500
CALOTMUL 375
CAMPECHE 544
CANSACBE 543
CEHCHE 335
CHAC 138
CHACBOLAY 347
CHACMULTUN 363
CHACTUN 341
CHELEMI 465
CHILIB 543
CHUMUL 206
CHUNCANOB 370
CHUNCATZIM 53
CHUNHUHUB 399
CHUNMU 374
CHUNYAXNIC 557
CUMPICH 456
DSECILNA 138
DZITBALCHE 501
DZULA 363
EL ROSAL 502
ESPERANZA, LA 336
HALAL 546
HALTUNCHON 463
HALTUNSIL 462
HAMPOLOL 543
HECELCHAKAN 501
HIOKOWITZ 207
HUNTICHMUL 343
HUNTUL-CHAC 278
ICHMAC 474
ICHPICH 558
ITAMPTE 363
ITZIMTE 554
KABAH 140
KAKALNA 375
KANALKU 503
KANCHI 543
KANKI 523
KIUIC 351
KOM 350
KUEPAK 207
KUPALOMA 327
KUXNECAN 278
LABNA 7
LA ESPERANZA 336
MAIOCH 532
MAXCANU 337
MUL-CHIC 278
MULUCHTZEKEL 81
MUNA 280
NAOX 397
NOHCACAB 368
NOHPAT 276
NUMUN 558
OPICHEN 336
OXKINTOK 281
OXKUTZCAB 206
PAKANTE 500
PICH CORRALCHE 206
POCBOC 501
POMUCH 541
POZO CIBICHE 278
ROSAL, EL 502
SABACCHE 68
SACBE 277
SACCACAL 371
SANACTE 138
SAN FELIPE 84, 505
SAN PABLO 375, 542
SAN PEDRO 470
SAN SIMON 138
SANTA ANA 205
SANTA ELENA 278
SANTA MARIA 369
SANTA RITA 206
SAYIL 85
SISILA 480
SULPACAL 371
TABI 205
TAMPAK 374
TANTAH 557
TECHOH 206
TEKAX 369
TENABO 542
TEPAKAN 500
TICUL 278
TICUM 370
TZEMEZAKAL 278
TZOCCHEN 465
UNNAMED SITE 279
UXMAL 208
XAMPON 207
XCALOPEC 346
XCALUMKIN 418
X'CASTILLO 325
XCAVIL DE YAXCHE 138
XCEPKU 334
XCOCH 278
XCOCHA 508
XCOCHKAX 386
XCORRALCHE 497
XCORRALCOT 520

XCUCSUC 486
XCULCACAB 558
XCULOC 377
XEMTZIL 325
XKALACHETZIMIN 495
XKALUPOCOCH 207
XKASTUN 506
XKECHE 335
XKEPKU 334
XKICHMOOK 371
X-KUKICAN 84
XLABPAK 60
XMOP 500
XOCNECEH 278
XTAMPAK 515
XTUN 544
XUL 350
XULMIL 339
YAKAL-CHUC 558
YAKALMAI 490
YAXCHE-XLABPAK 346
YIBA 278

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